

APPENDIX A.--Physical, cultural, and water-quality data
for lakes visited in 1981

DEAD LAKE

CLARK COUNTY

WRIA 28

T01N-R03E-02

LATITUDE 45° 35' 59" LONGITUDE 122° 24' 33"

PHYSICAL DATA

Drainage area	0.59 mi ²
Altitude	175 ft
Lake Area	23 acres
Lake Volume	310 acre-ft
Mean Depth	14 ft
Maximum Depth	30 ft
Shoreline Length	0.92 mi
Shoreline Configuration	1.4
Development of Volume	0.46
Bottom Slope	2.7 pct
Surface Inflow	No
Surface Outflow	No

CULTURAL DATA

Residential Development	5	pct
Number of Nearshore Homes	3	
Land Use in Drainage Basin		
Residential-Urban	0	pct
Residential-Suburban	13	pct
Agricultural	0	pct
Forest or Unproductive	83	pct
Lake Surface	4	pct
Public Boat Access to Lake	No	

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

Date

June 16, 1981

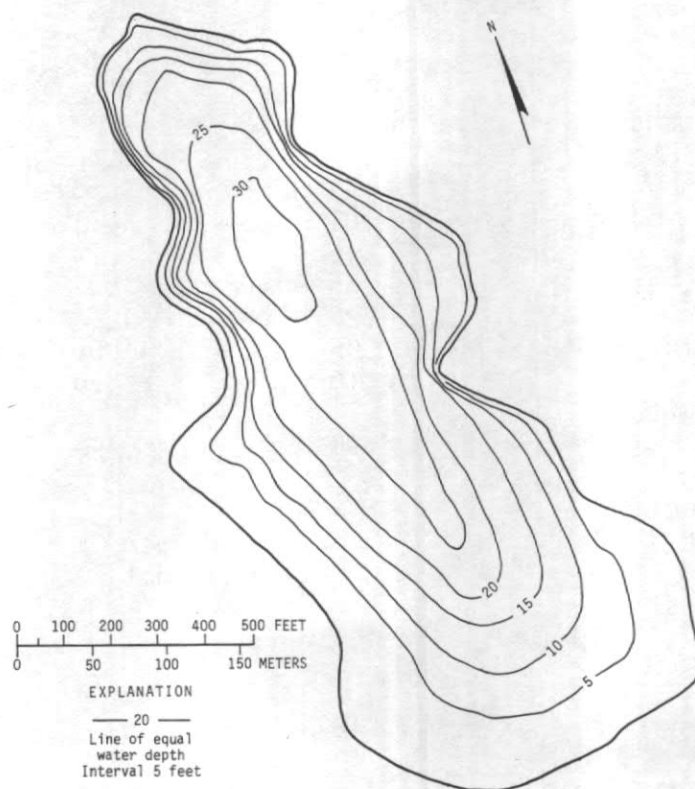
Depth (ft)	3	25
Water Temperature (°C)	17.7	7.1
Dissolved Oxygen	10.9	0.2
Specific Conductance (umho)	67	94
pH (units)	7.3	6.4
Total Nitrate, as N	0.02	.02
Total Nitrite, as N	.00	.01
Total Ammonia, as N	.15	.74
Total Organic Nitrogen, as N	.40	1.4
Total Nitrogen, as N	.57	2.1
Dissolved Orthophosphate, as P	.02	.06
Total Phosphorus, as P	.05	.20
Secchi-Disc Visibility (ft)		6
Chlorophyll <u>a</u> (ug/L)	10.1	--
Aquatic Macrophyte Coverage		
Littoral Zone		90 pct
Water-Surface Zone		5 pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value (Bortleson, 1978) 146

Trophic State Index (Carlson, 1977)

TSI _{SD}	51
TSI _{TP}	61
TSI _{Chl}	53



Dead Lake, Clark County. Photo taken June 16, 1981, view northerly.
Bathymetric map from Washington Department of Game, November 23, 1947.

LACKAMAS LAKE

CLARK COUNTY

WRIA 28

T01N-R03E-02

LATITUDE 45° 36' 16" LONGITUDE 122° 24' 22"

PHYSICAL DATA

Drainage area	64.3 mi ²
Altitude	179 ft
Lake Area	320 acres
Lake Volume	7500 acre-ft
Mean Depth	24 ft
Maximum Depth	65 ft
Shoreline Length	5.3 mi
Shoreline Configuration	2.1
Development of Volume	0.37
Bottom Slope	1.6 pct
Surface Inflow	Yes
Surface Outflow	Yes

CULTURAL DATA

Residential Development	15	pct
Number of Nearshore Homes	56	
Land Use in Drainage Basin		
Residential-Urban	0	pct
Residential-Suburban	<1	pct
Agricultural	49	pct
Forest or Unproductive	50	pct
Lake Surface	1	pct
Public Boat Access to Lake	Yes	

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

Date

June 16, 1981

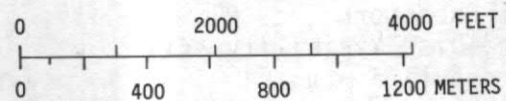
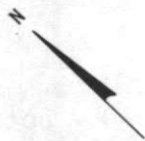
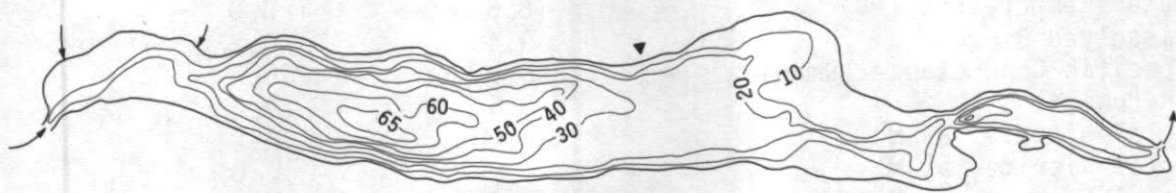
Depth (ft)	3	59
Water Temperature (°C)	15.8	9.5
Dissolved Oxygen	9.1	0.2
Specific Conductance (umho)	62	68
pH (units)	6.7	6.4
Total Nitrate, as N	0.44	.63
Total Nitrite, as N	.01	.01
Total Ammonia, as N	.16	.24
Total Organic Nitrogen, as N	.55	.62
Total Nitrogen, as N	1.2	1.5
Dissolved Orthophosphate, as P	.05	.06
Total Phosphorus, as P	.10	.20
Secchi-Disc Visibility (ft)		4
Chlorophyll <u>a</u> (ug/L)	4.98	--
Aquatic Macrophyte Coverage		
Littoral Zone		60 pct
Water-Surface Zone		<1 pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value 199

Trophic State Index (Carlson, 1977)

TSI _{SD}	57
TSI _{TP}	71
TSI _{Chl}	46



EXPLANATION
 — 20 —
 Line of equal
 water depth
 Interval 10 and 5 feet

Lackamas Lake, Clark County. Photo taken July 1, 1968.
 Bathymetric map from Washington Department of Game, November 18, 1947.

CURLEW LAKE

FERRY COUNTY

WRIA 60

T38N-R33E-28

LATITUDE 48° 46' 03" LONGITUDE 118° 39' 23"

PHYSICAL DATA

Drainage area	64.5 mi ²
Altitude	2,333 ft
Lake Area	920 acres
Lake Volume	40,000 acre-ft
Mean Depth	43 ft
Maximum Depth	130 ft
Shoreline Length	16 mi
Shoreline Configuration	3.7
Development of Volume	0.33
Bottom Slope	1.8 pct
Surface Inflow	Yes
Surface Outflow	Yes

CULTURAL DATA

Residential Development	20	pct
Number of Nearshore Homes	148	
Land Use in Drainage Basin		
Residential-Urban	0	pct
Residential-Suburban	<1	pct
Agricultural	13	pct
Forest or Unproductive	85	pct
Lake Surface	2	pct
Public Boat Access to Lake	Yes	

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

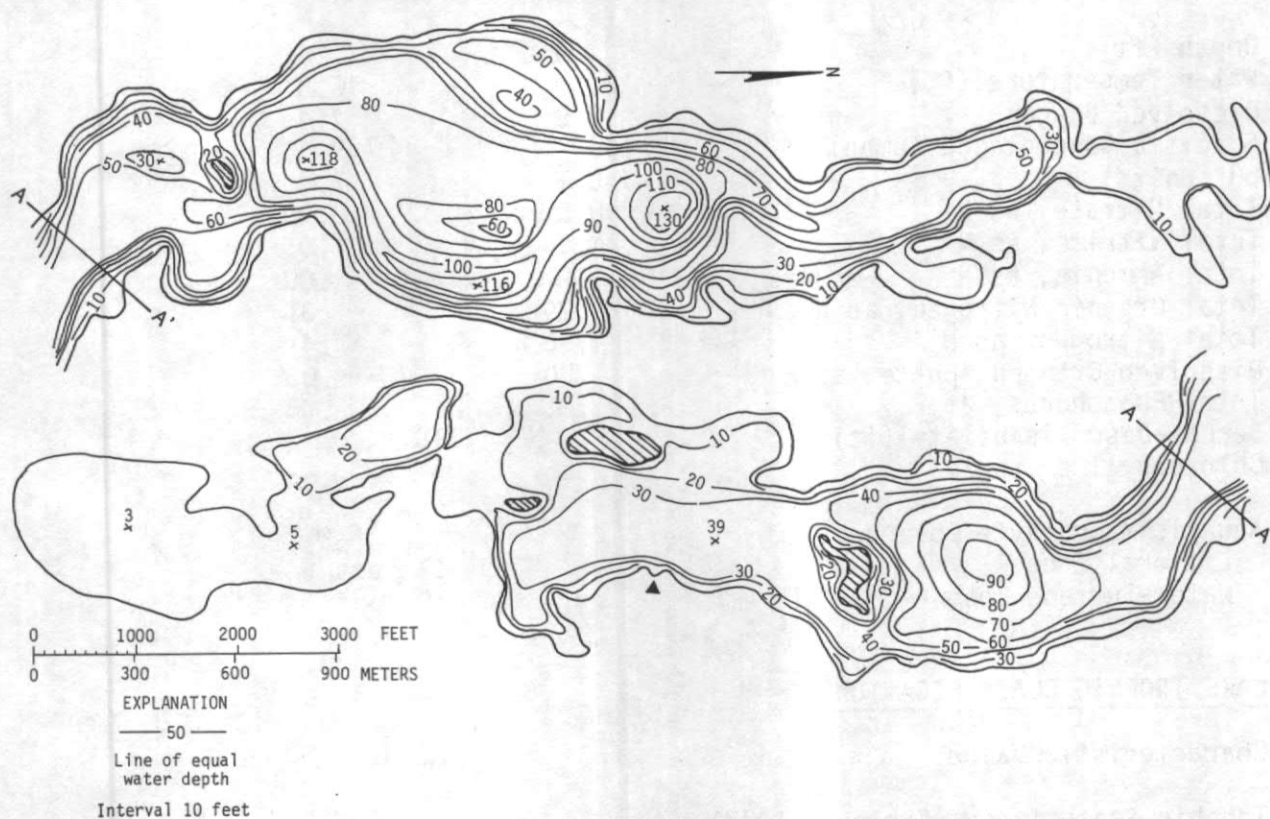
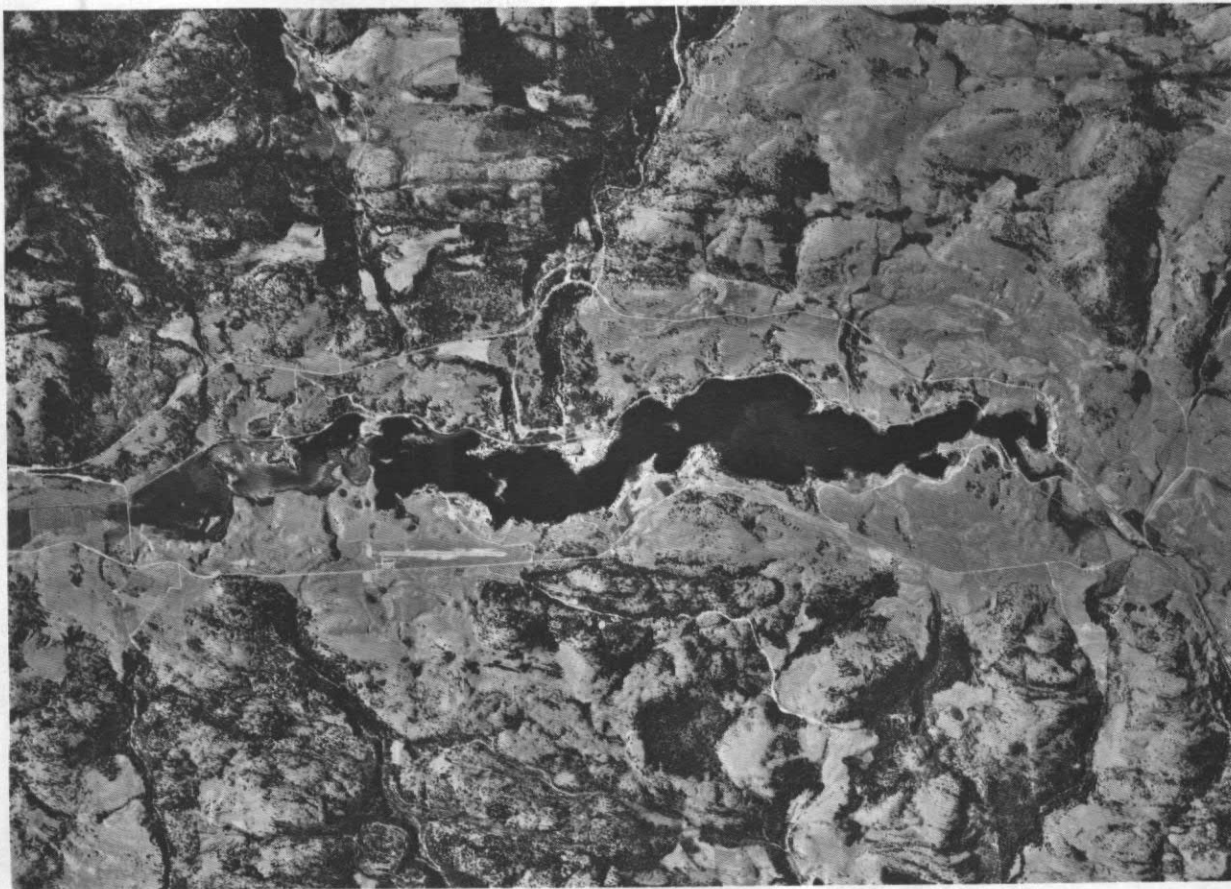
Date

July 15, 1981

Depth (ft)	3	100
Water Temperature (°C)	18.6	6.0
Dissolved Oxygen	9.4	0.2
Specific Conductance (umho)	223	270
pH (units)	8.5	7.0
Total Nitrate, as N	0.00	.24
Total Nitrite, as N	.00	.01
Total Ammonia, as N	.08	.10
Total Organic Nitrogen, as N	.61	.45
Total Nitrogen, as N	.69	.80
Dissolved Orthophosphate, as P	<.01	.10
Total Phosphorus, as P	.02	.10
Secchi-Disc Visibility (ft)		9
Chlorophyll <u>a</u> (ug/L)	2.42	--
Aquatic Macrophyte Coverage		
Littoral Zone		95 pct
Water-Surface Zone		0 pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value	98
Trophic State Index (Carlson, 1977)	
TSI _{SD}	45
TSI _{TP}	47
TSI _{Chl}	39



Curlew Lake, Ferry County. Photo taken July 22, 1977.
Bathymetric map from Washington Department of Game, March 1949.

FRENCH JOHNS LAKE

FERRY COUNTY

WRIA 52

T29N-R33E-20

LATITUDE 48° 00' 13" LONGITUDE 118° 41' 18"

PHYSICAL DATA

Drainage area	21.4 mi ²
Altitude	1,320 ft
Lake Area	17 acres
Lake Volume	262 acre-ft
Mean Depth	15 ft
Maximum Depth	29 ft
Shoreline Length	1.1 mi
Shoreline Configuration	1.9
Development of Volume	0.53
Bottom Slope	3.0 pct
Surface Inflow	Yes
Surface Outflow	No

CULTURAL DATA

Residential Development	0	pct
Number of Nearshore Homes	0	
Land Use in Drainage Basin		
Residential-Urban	0	pct
Residential-Suburban	0	pct
Agricultural	2	pct
Forest or Unproductive	98	pct
Lake Surface	<1	pct

Public Boat Access to Lake No

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

Date

July 16, 1981

Depth (ft)	3	26
Water Temperature (°C)	20.9	15.8
Dissolved Oxygen	8.8	7.4
Specific Conductance (umho)	162	159
pH (units)	8.1	7.8
Total Nitrate, as N	0.00	0.00
Total Nitrite, as N	.00	.01
Total Ammonia, as N	.07	.09
Total Organic Nitrogen, as N	.29	.31
Total Nitrogen, as N	.36	.41
Dissolved Orthophosphate, as P	.00	.03
Total Phosphorus, as P	.01	.06
Secchi-Disc Visibility (ft)		15
Chlorophyll <u>a</u> (ug/L)	1.36	--

Aquatic Macrophyte Coverage

Littoral Zone

<1 pct

Water-Surface Zone

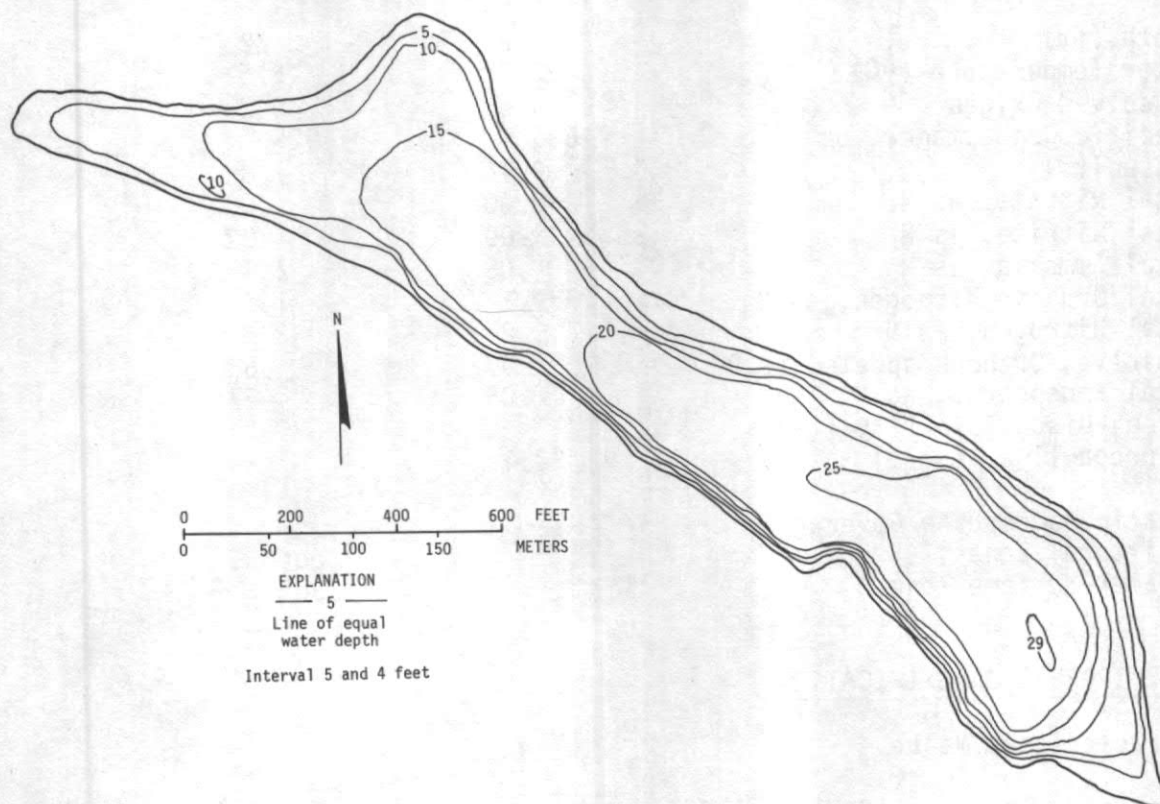
0 pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value 45

Trophic State Index (Carlson, 1977)

TSI_{SD} 38TSI_{TP} 37TSI_{Chl} 34



French Johns Lake, Ferry County. Photo taken July 16, 1981, view northwesterly.
Bathymetric map from U.S. Geological Survey, June 24, 1981.

THOMPSON LAKE

GRANT COUNTY

WRIA 42

T27N-R29E-11

LATITUDE 47° 50' 54" LONGITUDE 119° 08' 17"

PHYSICAL DATA

Drainage area	22 mi ²
Altitude	1,570 ft
Lake Area	35 acres
Lake Volume	441 acre-ft
Mean Depth	13 ft
Maximum Depth	25 ft
Shoreline Length	0.98 mi
Shoreline Configuration	1.2
Development of Volume	0.51
Bottom Slope	1.8 pct
Surface Inflow	No
Surface Outflow	No

CULTURAL DATA

Residential Development	0	pct
Number of Nearshore Homes	0	
Land Use in Drainage Basin		
Residential-Urban	0	pct
Residential-Suburban	0	pct
Agricultural	0	pct
Forest or Unproductive	80	pct
Lake Surface	20	pct
Public Boat Access to Lake	No	

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

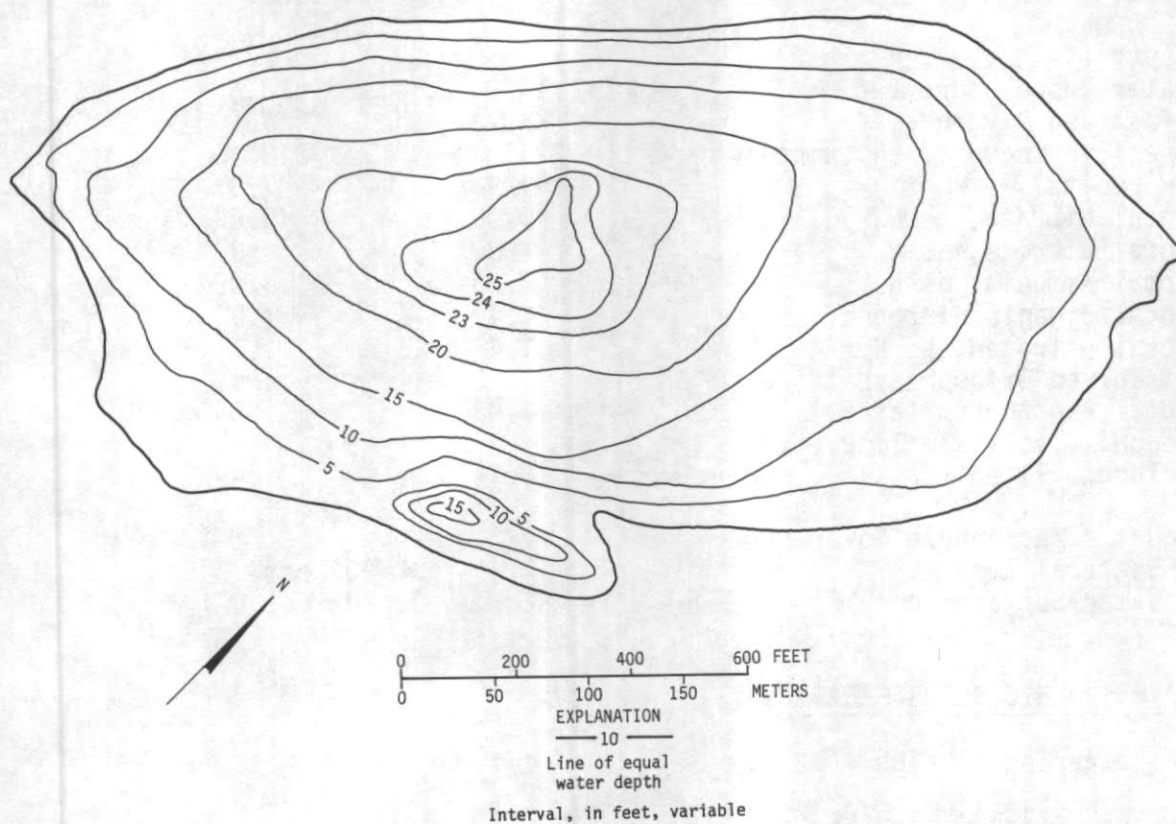
Date

July 16, 1981

Depth (ft)	3	22
Water Temperature (°C)	22.2	15.5
Dissolved Oxygen	15.6	0.2
Specific Conductance (umho)	885	925
pH (units)	9.1	7.8
Total Nitrate, as N	0.00	.00
Total Nitrite, as N	.00	.02
Total Ammonia, as N	.08	2.4
Total Organic Nitrogen, as N	2.1	1.2
Total Nitrogen, as N	2.2	3.6
Dissolved Orthophosphate, as P	.00	.68
Total Phosphorus, as P	.05	.77
Secchi-Disc Visibility (ft)		7
Chlorophyll <u>a</u> (ug/L)	23.4	--
Aquatic Macrophyte Coverage		
Littoral Zone		30 pct
Water-Surface Zone		5 pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value	304
Trophic State Index (Carlson, 1977)	
TSI _{SD}	49
TSI _{TP}	61
TSI _{Chl}	62



Thompson Lake, Grant County. Photo taken July 16, 1981, view southerly.
Bathymetric map from U.S. Geological Survey, June 24, 1981.

CRANBERRY LAKE

ISLAND COUNTY

WRIA 06

T34N-R01E-35

LATITUDE 48° 23' 22" LONGITUDE 122° 39' 23"

PHYSICAL DATA

Drainage area	0.61 mi ²
Altitude	20 ft
Lake Area	130 acres
Lake Volume	1,600 acre-ft
Mean Depth	13 ft
Maximum Depth	25 ft
Shoreline Length	2.8 mi
Shoreline Configuration	1.8
Development of Volume	0.50
Bottom Slope	0.95 pct
Surface Inflow	No
Surface Outflow	No

CULTURAL DATA

Residential Development	0	pct
Number of Nearshore Homes	0	
Land Use in Drainage Basin		
Residential-Urban	0	pct
Residential-Suburban	0	pct
Agricultural	0	pct
Forest or Unproductive	69	pct
Lake Surface	31	pct

Public Boat Access to Lake Yes

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

Date

July 9, 1981

Depth (ft)	3	22
Water Temperature (°C)	18.9	16.5
Dissolved Oxygen	8.7	1.1
Specific Conductance (umho)	220	218
pH (units)	7.9	7.3
Total Nitrate, as N	0.00	0.02
Total Nitrite, as N	.00	.00
Total Ammonia, as N	.05	.09
Total Organic Nitrogen, as N	1.4	1.0
Total Nitrogen, as N	1.4	1.1
Dissolved Orthophosphate, as P	.00	<.01
Total Phosphorus, as P	.03	.05
Secchi-Disc Visibility (ft)		9
Chlorophyll <u>a</u> (ug/L)	8.16	--

Aquatic Macrophyte Coverage

Littoral Zone

90 pct

Water-Surface Zone

20 pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value

178

Trophic State Index (Carlson, 1977)

TSI_{SD}

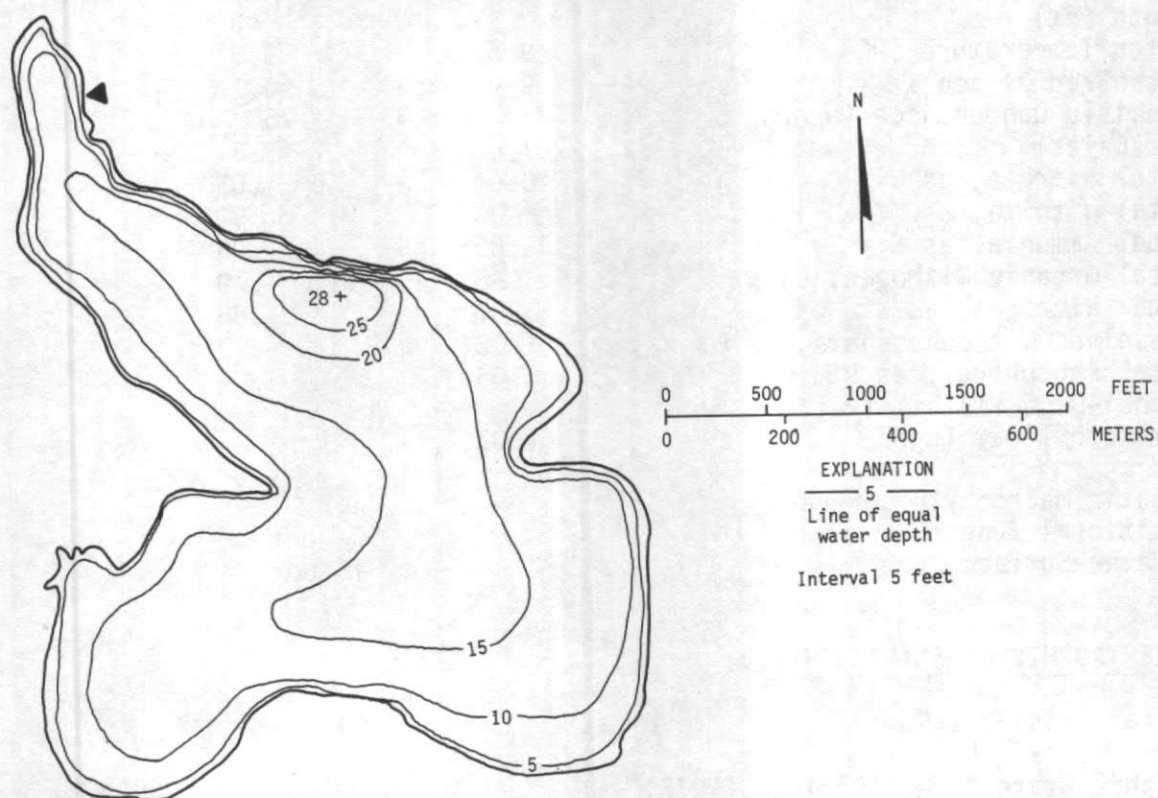
45

TSI_{TP}

53

TSI_{Chl}

51



Cranberry (34N-1E-35) Lake, Island County. Photo taken July 9, 1981, view southerly. Bathymetric map from Washington Department of Game, July 23, 1950.

DEER LAKE

ISLAND COUNTY

WRIA 06

T29N-R03E-26

LATITUDE 47° 58' 28" LONGITUDE 122° 22' 41"

PHYSICAL DATA

Drainage area	1.19 mi ²
Altitude	352 ft
Lake Area	81 acres
Lake Volume	1,700 acre-ft
Mean Depth	20 ft
Maximum Depth	50 ft
Shoreline Length	1.7 mi
Shoreline Configuration	1.3
Development of Volume	0.40
Bottom Slope	2.4 pct
Surface Inflow	No
Surface Outflow	Yes

CULTURAL DATA

Residential Development	70	pct
Number of Nearshore Homes	37	
Land Use in Drainage Basin		
Residential-Urban	0	pct
Residential-Suburban	5	pct
Agricultural	15	pct
Forest or Unproductive	65	pct
Lake Surface	11	pct
Public Boat Access to Lake	Yes	

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

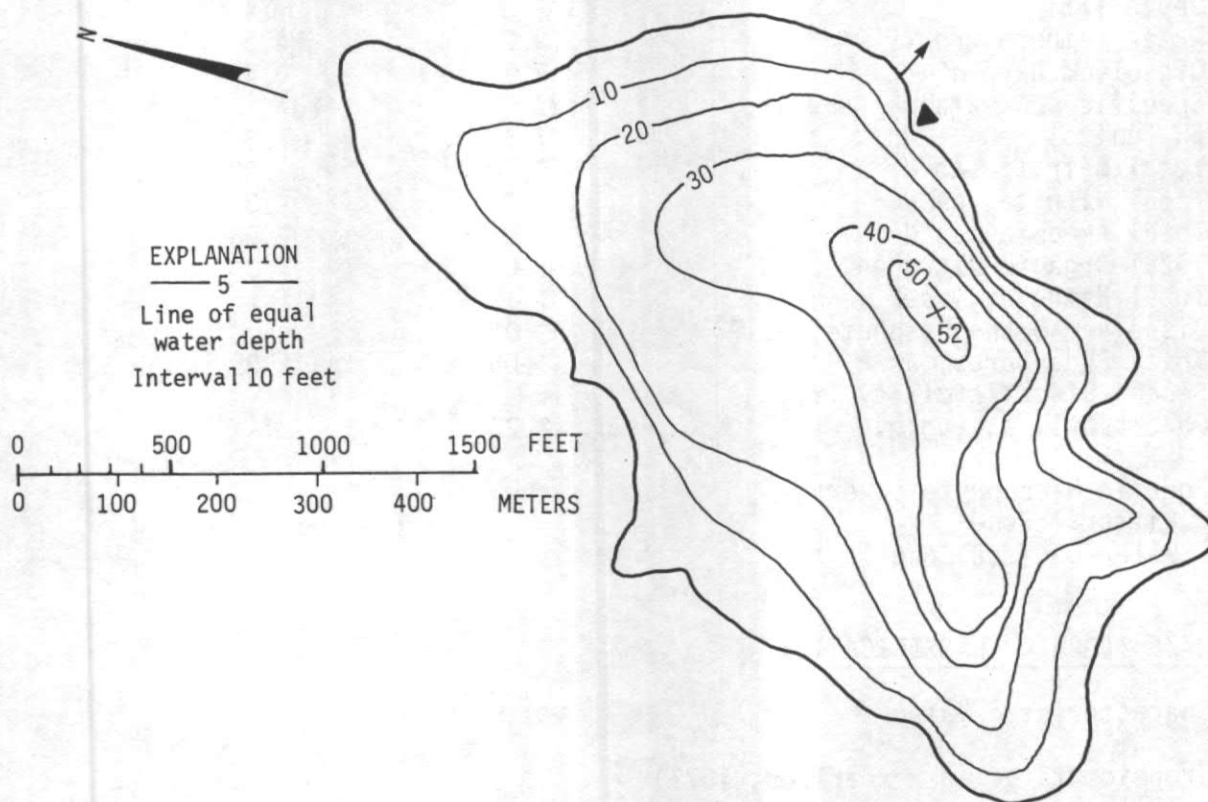
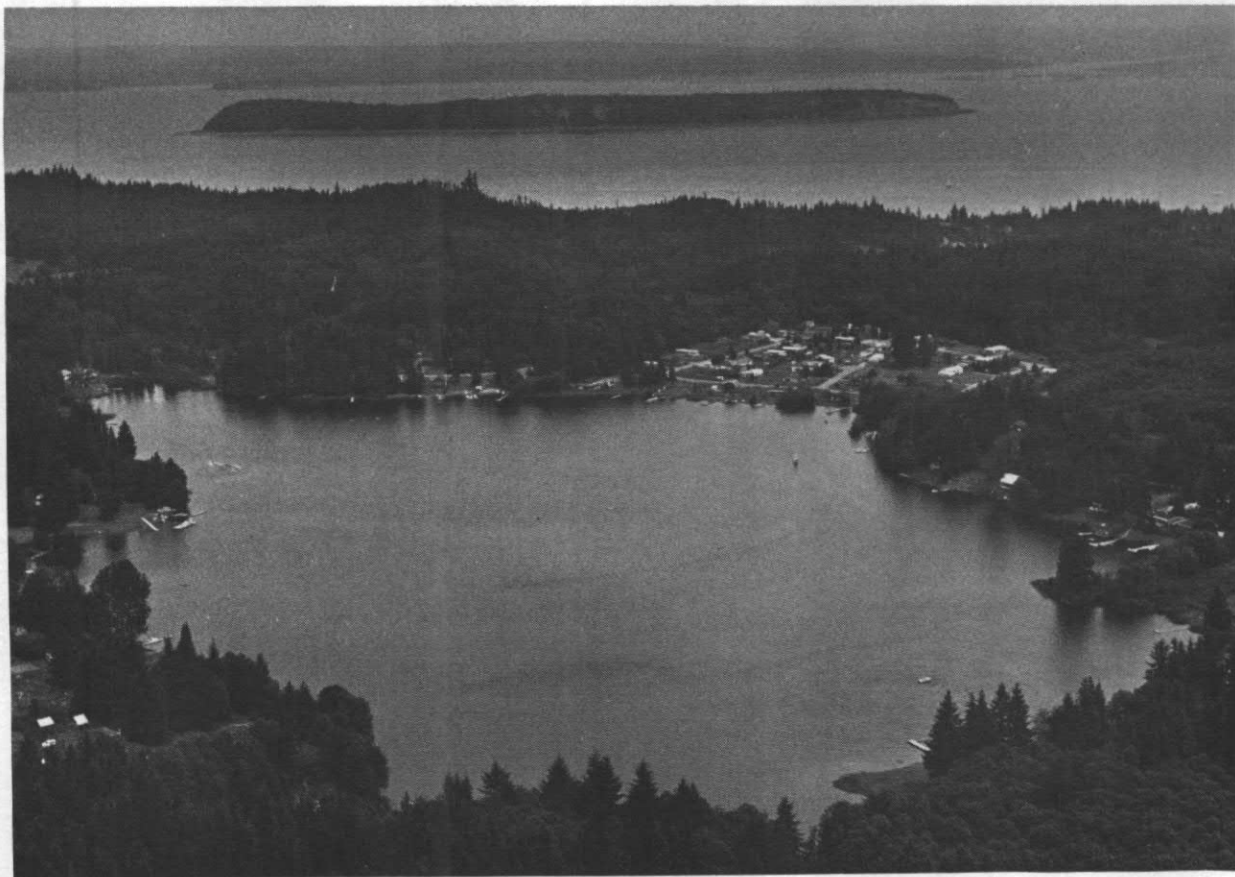
Date

July 2, 1981

Depth (ft)	3	43
Water Temperature (°C)	19.6	9.5
Dissolved Oxygen	9.9	0.2
Specific Conductance (umho)	77	76
pH (units)	7.8	7.8
Total Nitrate, as N	0.01	.01
Total Nitrite, as N	.00	.00
Total Ammonia, as N	.05	.08
Total Organic Nitrogen, as N	.85	.79
Total Nitrogen, as N	.91	.88
Dissolved Orthophosphate, as P	.02	.02
Total Phosphorus, as P	.06	.04
Secchi-Disc Visibility (ft)		19
Chlorophyll <u>a</u> (ug/L)	1.03	--
Aquatic Macrophyte Coverage		
Littoral Zone		90 pct
Water-Surface Zone		1 pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value	93
Trophic State Index (Carlson, 1977)	
TSI _{SD}	35
TSI _{TP}	63
TSI _{Chl}	31



Deer Lake, Island County. Photo taken July 2, 1981, view northeasterly.
 Bathymetric map from Washington Department of Game, July 11, 1949.

OLIVER LAKE

ISLAND COUNTY

WRIA 06

T29N-R02E-23

LATITUDE 47° 58' 48" LONGITUDE 122° 31' 13"

PHYSICAL DATA

Drainage area	0.16 mi ²
Altitude	243 ft
Lake Area	16 acres
Lake Volume	166 acre-ft
Mean Depth	11 ft
Maximum Depth	19 ft
Shoreline Length	0.58 mi
Shoreline Configuration	1.0
Development of Volume	0.56
Bottom Slope	2.0 pct
Surface Inflow	No
Surface Outflow	No

CULTURAL DATA

Residential Development	0	pct
Number of Nearshore Homes	0	
Land Use in Drainage Basin		
Residential-Urban	0	pct
Residential-Suburban	0	pct
Agricultural	8	pct
Forest or Unproductive	81	pct
Lake Surface	11	pct
Public Boat Access to Lake	No	

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

Date

July 2, 1981

Depth (ft)	3	14
Water Temperature (°C)	19.2	14.5
Dissolved Oxygen	8.7	0.4
Specific Conductance (umho)	137	137
pH (units)	7.3	7.2
Total Nitrate, as N	0.00	.00
Total Nitrite, as N	.01	.01
Total Ammonia, as N	.08	.08
Total Organic Nitrogen, as N	1.0	1.0
Total Nitrogen, as N	1.1	1.1
Dissolved Orthophosphate, as P	.03	.03
Total Phosphorus, as P	.05	.05
Secchi-Disc Visibility (ft)		11
Chlorophyll <u>a</u> (ug/L)	2.23	--

Aquatic Macrophyte Coverage

Littoral Zone

100 pct

Water-Surface Zone

10 pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value

125

Trophic State Index (Carlson, 1977)

TSI_{SD}

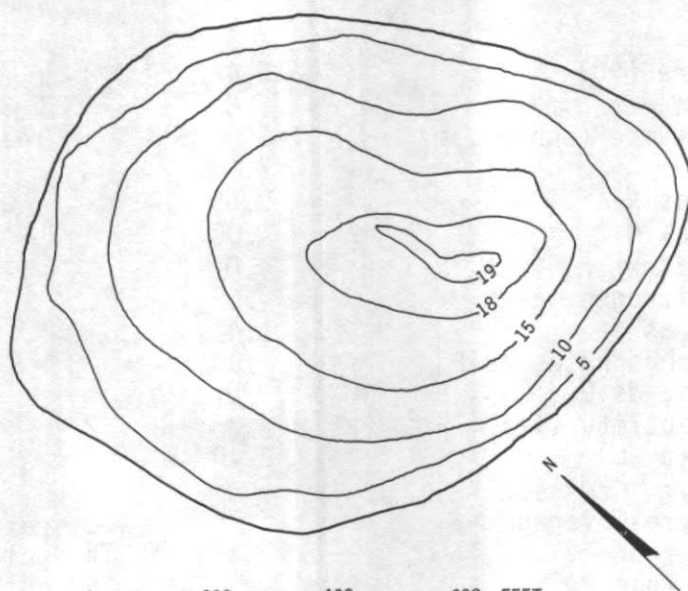
43

TSI_{TP}

61

TSI_{Chl}

38



0 200 400 600 FEET
0 50 100 150 METERS

EXPLANATION

10
Line of equal
water depth

Interval, in feet, variable

Oliver Lake, Island County. Photo taken July 2, 1981, view northeasterly.
Bathymetric map from U.S. Geological Survey, June 17, 1981.

SILVER LAKE

ISLAND COUNTY

WRIA 06

T33N-R02E-34

LATITUDE 48° 18' 12" LONGITUDE 122° 31' 46"

PHYSICAL DATA

Drainage area	0.30 mi ²
Altitude	334 ft
Lake Area	16 acres
Lake Volume	262 acre-ft
Mean Depth	16 ft
Maximum Depth	30 ft
Shoreline Length	0.73 mi
Shoreline Configuration	1.3
Development of Volume	0.54
Bottom Slope	3.2 pct
Surface Inflow	No
Surface Outflow	No

CULTURAL DATA

Residential Development	5	pct
Number of Nearshore Homes	2	
Land Use in Drainage Basin		
Residential-Urban	0	pct
Residential-Suburban	0	pct
Agricultural	0	pct
Forest or Unproductive	92	pct
Lake Surface	8	pct
Public Boat Access to Lake	No	

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

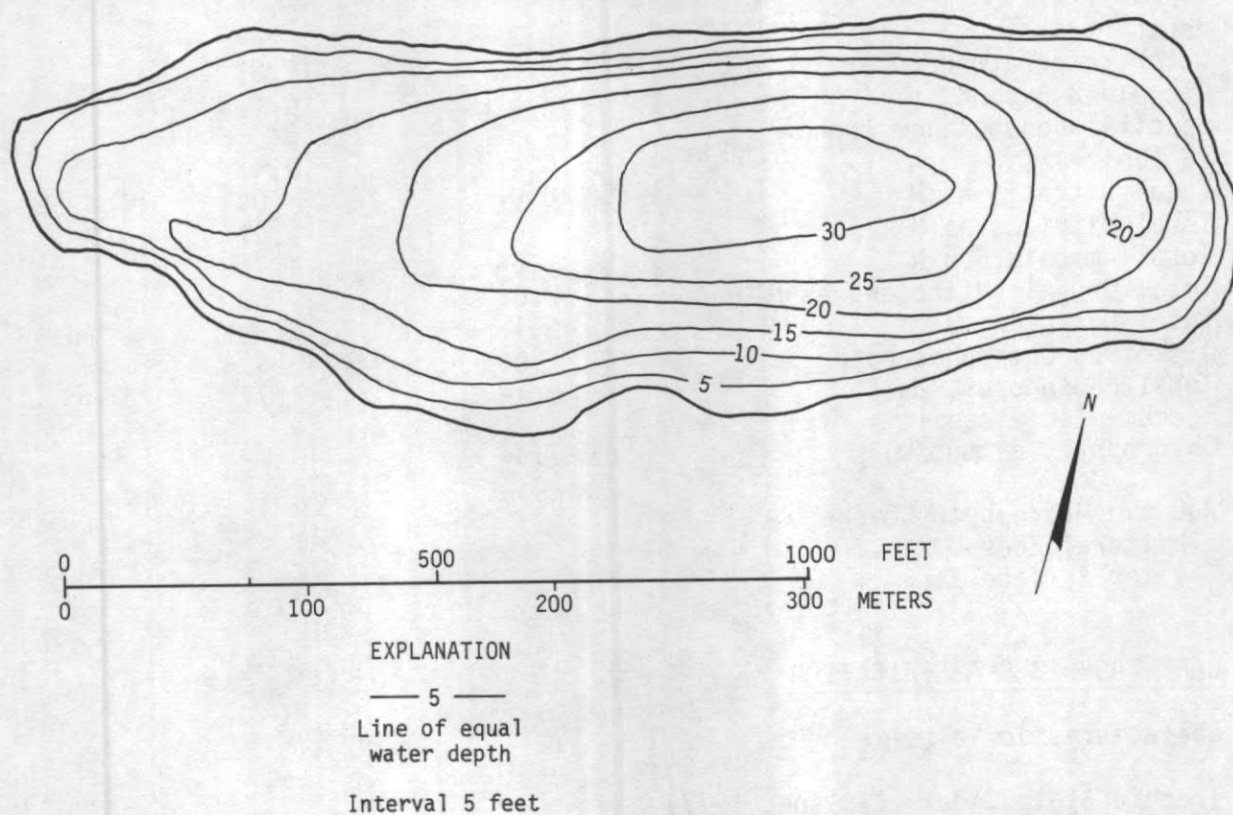
Date

July 9, 1981

Depth (ft)	3	19
Water Temperature (°C)	16.4	7.2
Dissolved Oxygen	6.8	2.2
Specific Conductance (umho)	145	147
pH (units)	7.1	7.0
Total Nitrate, as N	0.59	0.00
Total Nitrite, as N	.00	.00
Total Ammonia, as N	.07	.05
Total Organic Nitrogen, as N	.69	.52
Total Nitrogen, as N	1.4	.57
Dissolved Orthophosphate, as P	.00	<.01
Total Phosphorus, as P	.01	.01
Secchi-Disc Visibility (ft)		2
Chlorophyll <u>a</u> (ug/L)	2.40	--
Aquatic Macrophyte Coverage		
Littoral Zone		75 pct
Water-Surface Zone		<5 pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value	304
Trophic State Index (Carlson, 1977)	
TSI _{SD}	67
TSI _{TP}	37
TSI _{Chl}	39



Silver Lake, Island County. Photo taken July 9, 1981, view westerly.
Bathymetric map from U.S. Geological Survey, July 10, 1981.

ANDERSON LAKE

JEFFERSON COUNTY

WRIA 17

T29N-R01W-09

LATITUDE 48° 00' 54" LONGITUDE 122° 48' 04"

PHYSICAL DATA

Drainage area	1.40 mi ²
Altitude	250 ft
Lake Area	66 acres
Lake Volume	1,200 acre-ft
Mean Depth	19 ft
Maximum Depth	29 ft
Shoreline Length	1.6 mi
Shoreline Configuration	1.4
Development of Volume	0.64
Bottom Slope	1.5 pct
Surface Inflow	No
Surface Outflow	Yes

CULTURAL DATA

Residential Development	2	pct
Number of Nearshore Homes	1	
Land Use in Drainage Basin		
Residential-Urban	0	pct
Residential-Suburban	0	pct
Agricultural	7	pct
Forest or Unproductive	86	pct
Lake Surface	7	pct

Public Boat Access to Lake Yes

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

Date

July 2, 1981

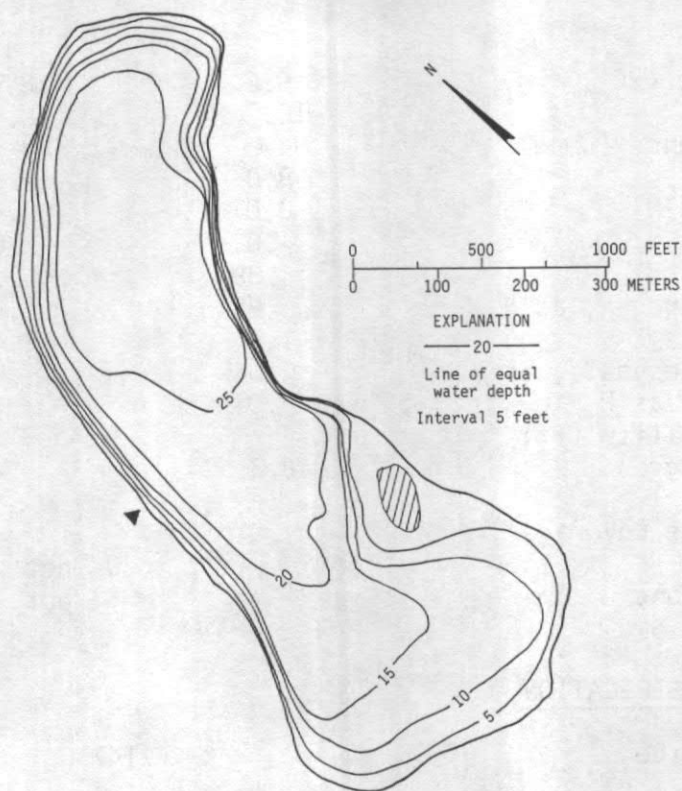
Depth (ft)	3	26
Water Temperature (°C)	19.0	11.8
Dissolved Oxygen	17.5	0.1
Specific Conductance (umho)	217	225
pH (units)	10.4	7.4
Total Nitrate, as N	0.01	.00
Total Nitrite, as N	.00	.01
Total Ammonia, as N	.06	1.7
Total Organic Nitrogen, as N	2.0	.80
Total Nitrogen, as N	2.1	2.5
Dissolved Orthophosphate, as P	.07	.69
Total Phosphorus, as P	.14	.77
Secchi-Disc Visibility (ft)		3
Chlorophyll <u>a</u> (ug/L)	87.4	--
Aquatic Macrophyte Coverage		
Littoral Zone		60 pct
Water-Surface Zone		1 pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value 639

Trophic State Index (Carlson, 1977)

TSISD	61
TSITP	75
TSIChl	74



Anderson Lake Jefferson County. Photo taken July 2, 1981, view northeasterly. Bathymetric map from County Engineer, July 1924.

GIBBS LAKE

JEFFERSON COUNTY

WRIA 17

T29N-R01W-28

LATITUDE 47° 58' 38" LONGITUDE 122° 48' 48"

PHYSICAL DATA

Drainage area	1.23 mi ²
Altitude	340 ft
Lake Area	44 acres
Lake Volume	1,200 acre-ft
Mean Depth	27 ft
Maximum Depth	47 ft
Shoreline Length	1.4 mi
Shoreline Configuration	1.5
Development of Volume	0.56
Bottom Slope	3.0 pct
Surface Inflow	No
Surface Outflow	Yes

CULTURAL DATA

Residential Development	8	pct
Number of Nearshore Homes	4	
Land Use in Drainage Basin		
Residential-Urban	0	pct
Residential-Suburban	<1	pct
Agricultural	0	pct
Forest or Unproductive	94	pct
Lake Surface	6	pct
Public Boat Access to Lake	No	

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

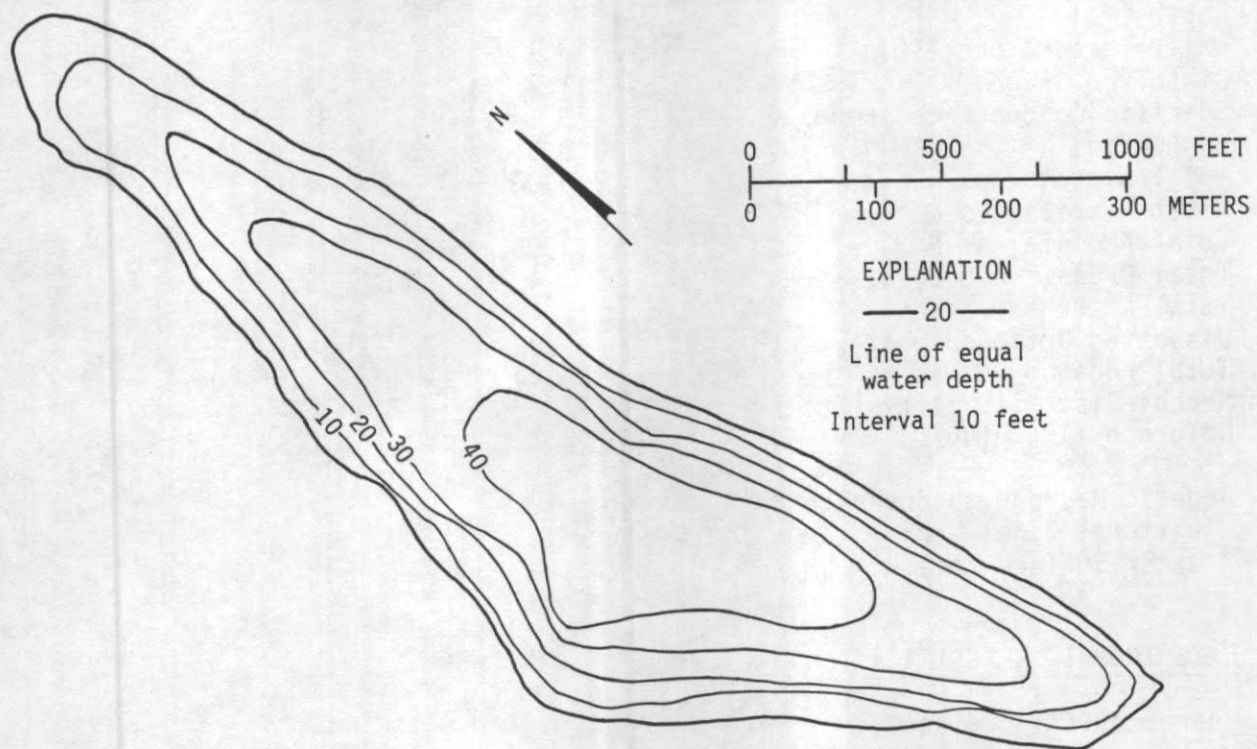
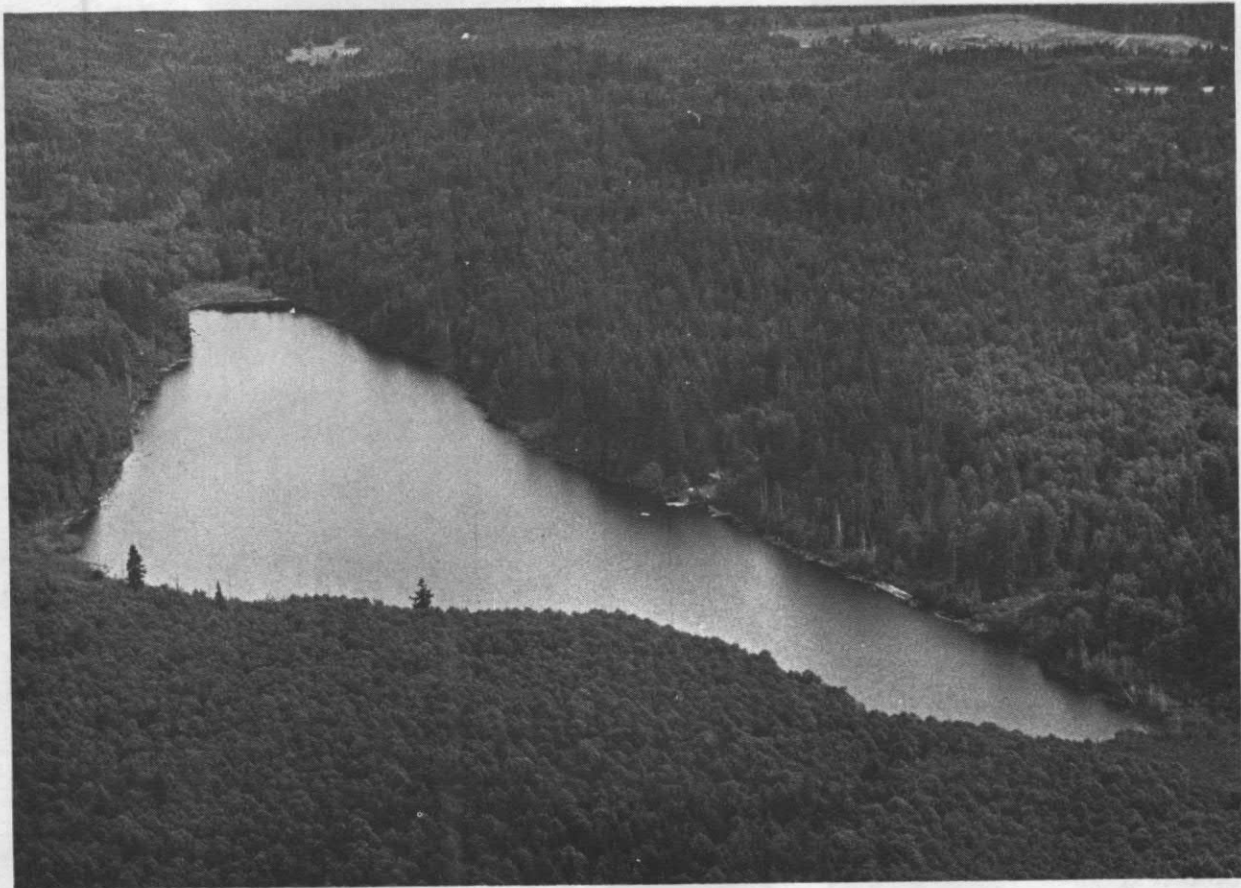
Date

July 2, 1981

Depth (ft)	3	44
Water Temperature (°C)	19.2	8.8
Dissolved Oxygen	10.7	0.1
Specific Conductance (umho)	84	93
pH (units)	8.0	7.1
Total Nitrate, as N	0.07	.02
Total Nitrite, as N	.01	.00
Total Ammonia, as N	.38	.53
Total Organic Nitrogen, as N	.92	.87
Total Nitrogen, as N	1.4	1.4
Dissolved Orthophosphate, as P	.04	.05
Total Phosphorus, as P	.04	.15
Secchi-Disc Visibility (ft)		9
Chlorophyll <u>a</u> (ug/L)	8.3	--
Aquatic Macrophyte Coverage		
Littoral Zone		70 pct
Water-Surface Zone		<5 pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value	147
Trophic State Index (Carlson, 1977)	
TSISD	45
TSITP	57
TSIChl	51



Gibbs Lake, Jefferson County. Photo taken July 2, 1981, view northeasterly.
 Bathymetric map from County Engineer, January 1926.

LELAND LAKE

JEFFERSON COUNTY

WRIA 17

T28N-R02W-26

LATITUDE 47° 53' 12" LONGITUDE 122° 53' 05"

PHYSICAL DATA

Drainage area	5.71 mi ²
Altitude	190 ft
Lake Area	110 acres
Lake Volume	1,400 acre-ft
Mean Depth	13 ft
Maximum Depth	20 ft
Shoreline Length	2.7 mi
Shoreline Configuration	1.9
Development of Volume	0.66
Bottom Slope	0.82 pct
Surface Inflow	No
Surface Outflow	No

CULTURAL DATA

Residential Development	25	pct
Number of Nearshore Homes	18	
Land Use in Drainage Basin		
Residential-Urban	0	pct
Residential-Suburban	0	pct
Agricultural	10	pct
Forest or Unproductive	87	pct
Lake Surface	3	pct
Public Boat Access to Lake	Yes	

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

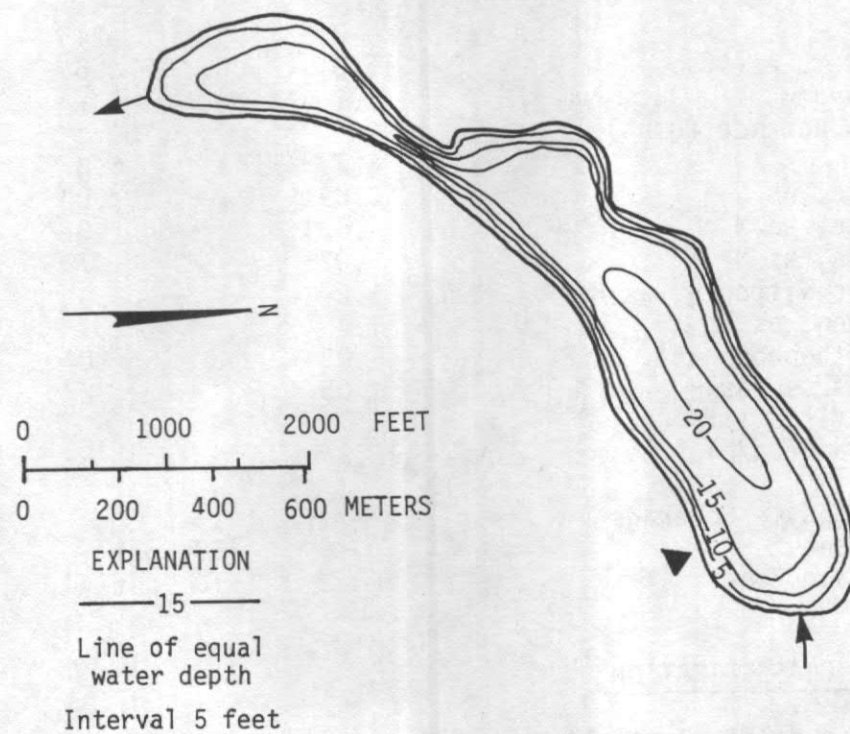
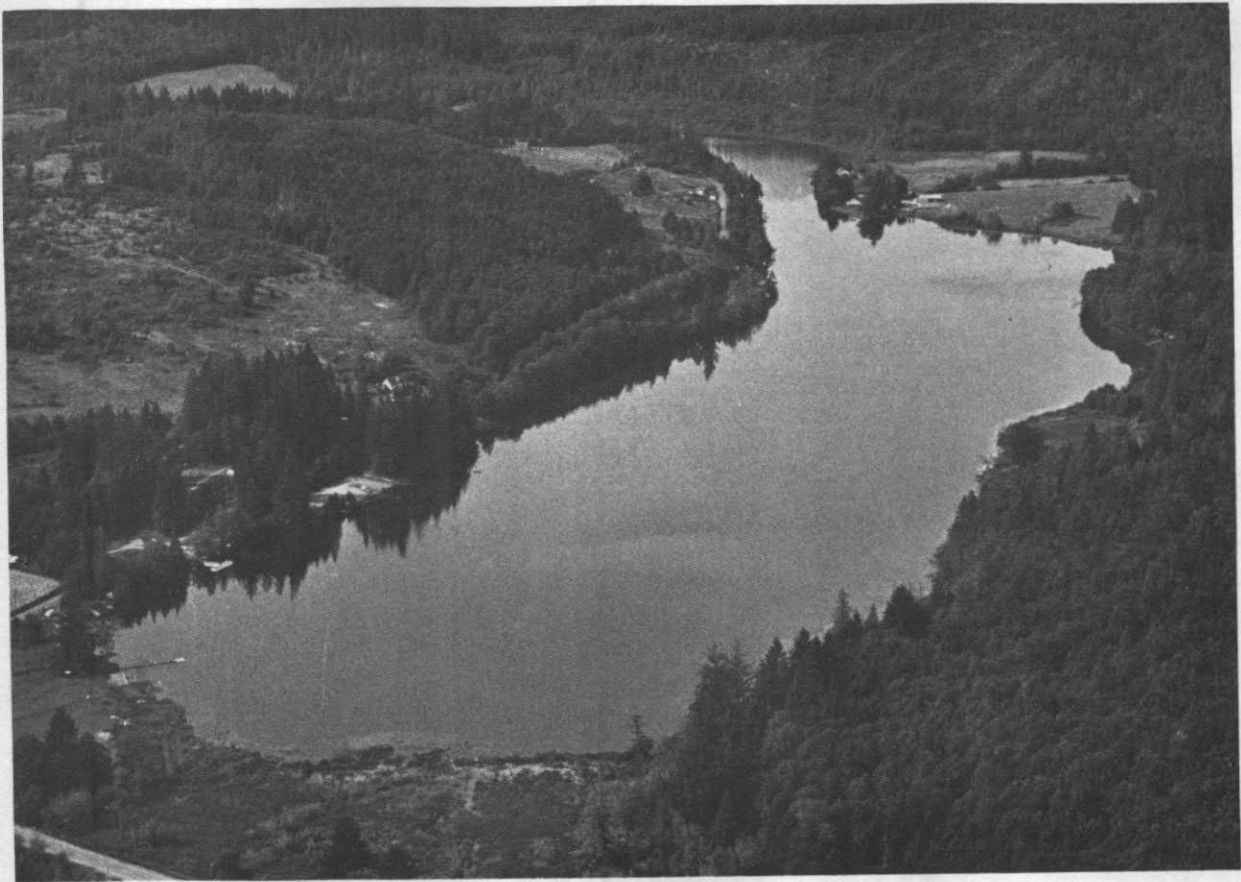
Date

July 2, 1981

Depth (ft)	3	19
Water Temperature (°C)	19.1	14.0
Dissolved Oxygen	11.4	0.4
Specific Conductance (umho)	79	83
pH (units)	8.0	6.9
Total Nitrate, as N	0.00	.00
Total Nitrite, as N	.00	.00
Total Ammonia, as N	.05	.04
Total Organic Nitrogen, as N	1.4	.96
Total Nitrogen, as N	1.4	1.0
Dissolved Orthophosphate, as P	.00	.03
Total Phosphorus, as P	.06	.06
Secchi-Disc Visibility (ft)	7	
Chlorophyll <u>a</u> (ug/L)	5.7	--
Aquatic Macrophyte Coverage		
Littoral Zone	90	pct
Water-Surface Zone	1	pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value	196
Trophic State Index (Carlson, 1977)	
TSI _{SD}	49
TSI _{TP}	63
TSI _{Chl}	48



Leland Lake, Jefferson County. Photo taken July 2, 1981, view southerly.
Bathymetric map from Washington Department of Game, July 19, 1952.

BASS LAKE

KING COUNTY

WRIA 09

T20N-R06E-02

LATITUDE 47° 15' 23" LONGITUDE 121° 59' 49"

PHYSICAL DATA

Drainage area	2.42 mi ²
Altitude	665 ft
Lake Area	23 acres
Lake Volume	270 acre-ft
Mean Depth	12 ft
Maximum Depth	26 ft
Shoreline Length	0.89 mi
Shoreline Configuration	1.3
Development of Volume	0.44
Bottom Slope	2.3 pct
Surface Inflow	No
Surface Outflow	Yes

CULTURAL DATA

Residential Development	5	pct
Number of Nearshore Homes	1	
Land Use in Drainage Basin		
Residential-Urban	0	pct
Residential-Suburban	0	pct
Agricultural	72	pct
Forest or Unproductive	27	pct
Lake Surface	1	pct
Public Boat Access to Lake	No	

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

Date

June 23, 1981

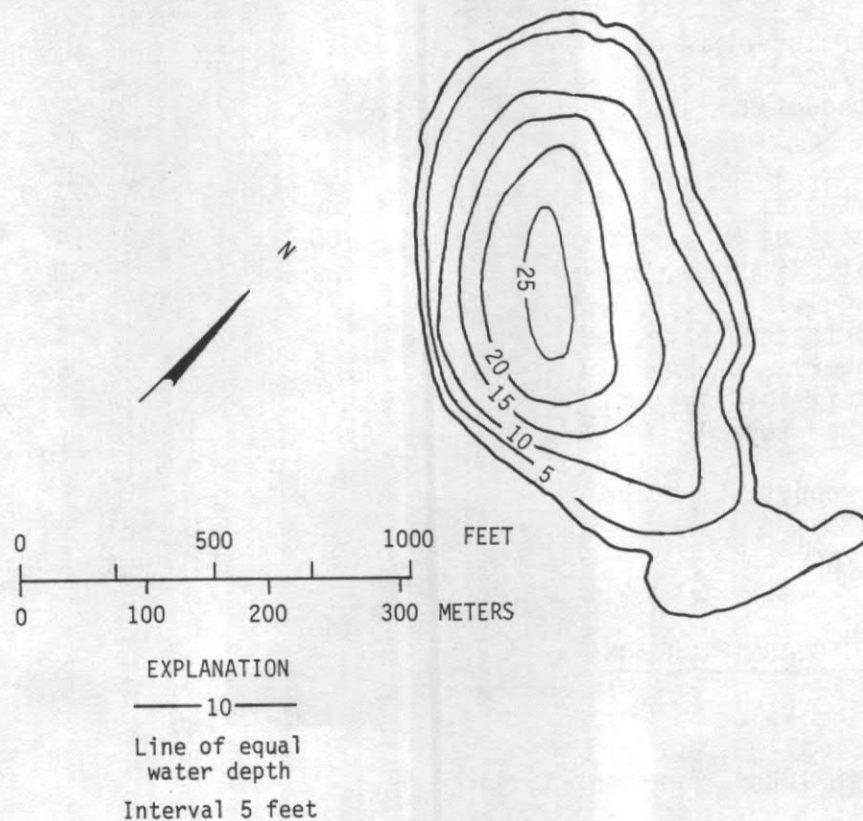
Depth (ft)	3	24
Water Temperature (°C)	15.0	8.8
Dissolved Oxygen	11.1	0.1
Specific Conductance (umho)	92	150
pH (units)	6.7	6.8
Total Nitrate, as N	0.09	.00
Total Nitrite, as N	.00	.01
Total Ammonia, as N	.07	.70
Total Organic Nitrogen, as N	1.2	2.0
Total Nitrogen, as N	1.4	2.7
Dissolved Orthophosphate, as P	.02	.04
Total Phosphorus, as P	.05	.27
Secchi-Disc Visibility (ft)		4
Chlorophyll <u>a</u> (ug/L)	18.9	--
Aquatic Macrophyte Coverage		
Littoral Zone		50 pct
Water-Surface Zone		10 pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value (Bortleson, 1978) 278

Trophic State Index (Carlson, 1977)

TSI _{SD}	57
TSI _{TP}	61
TSI _{Chl}	59



Bass Lake, King County. Photo taken June 23, 1981, view northwesterly.
Bathymetric map from U.S. Geological Survey, July 2, 1973.

BEAVER NO. 2 LAKE

KING COUNTY

WRIA 08

T24N-R06E-11

LATITUDE 47° 35' 10" LONGITUDE 122° 00' 03"

PHYSICAL DATA

Drainage area	1.14 mi ²
Altitude	406 ft
Lake Area	62 acres
Lake Volume	1,300 acre-ft
Mean Depth	21 ft
Maximum Depth	54 ft
Shoreline Length	2.0 mi
Shoreline Configuration	1.8
Development of Volume	0.39
Bottom Slope	2.9 pct
Surface Inflow	Yes
Surface Outflow	Yes

CULTURAL DATA

Residential Development	95	pct
Number of Nearshore Homes	81	
Land Use in Drainage Basin		
Residential-Urban	0	pct
Residential-Suburban	7	pct
Agricultural	0	pct
Forest or Unproductive	83	pct
Lake Surface	10	pct
Public Boat Access to Lake	Yes	

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

Date

June 26, 1981

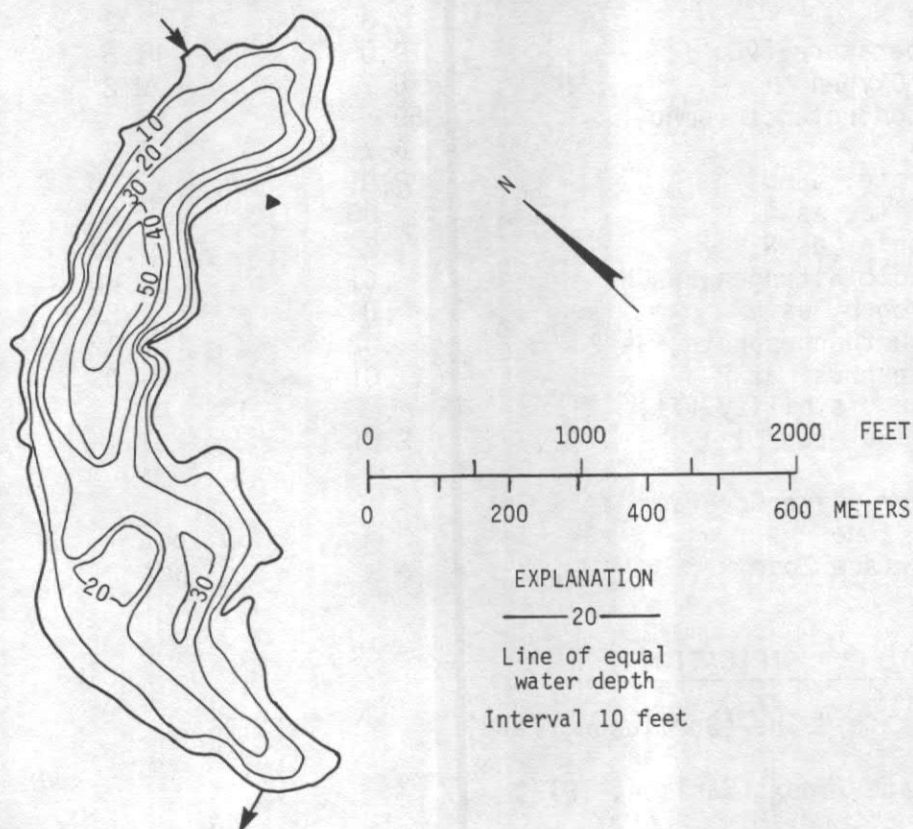
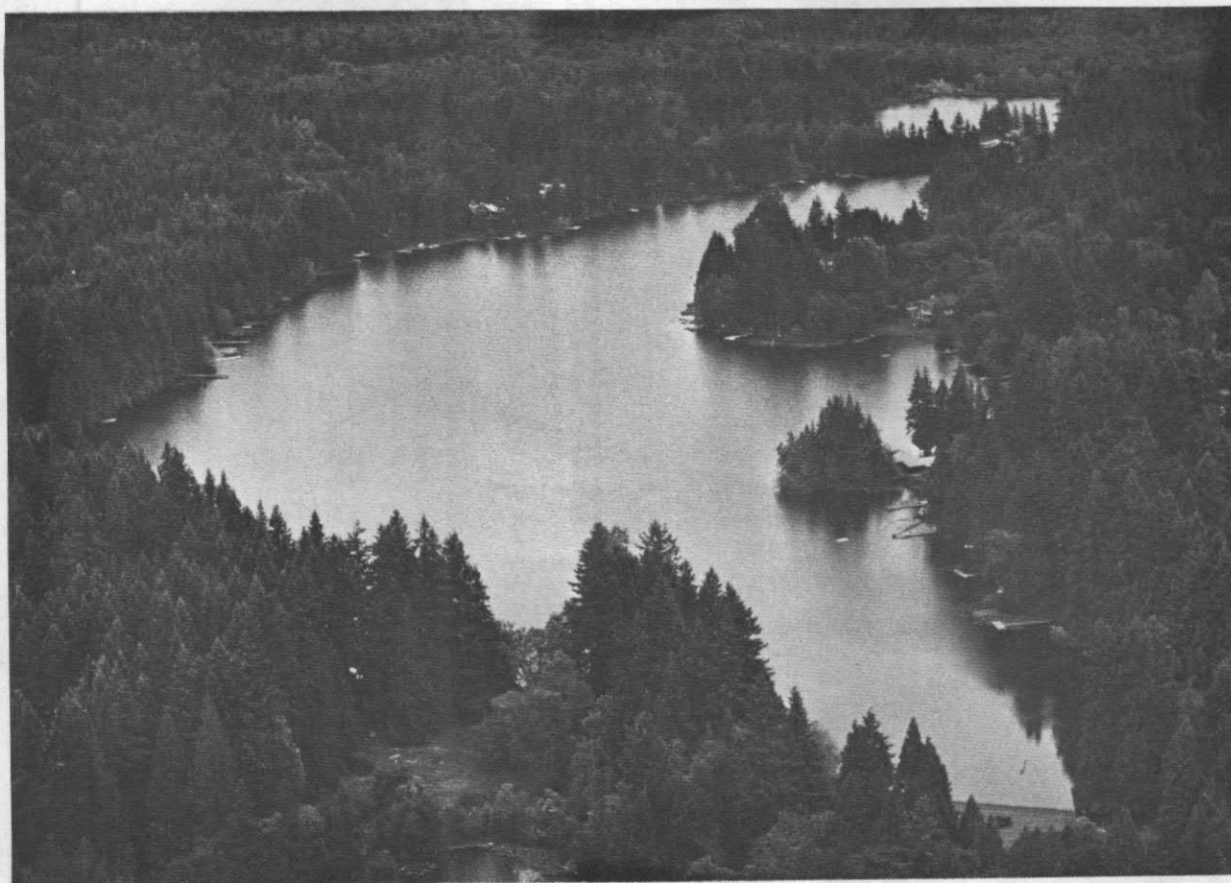
Depth (ft)	3	46
Water Temperature (°C)	19.2	7.8
Dissolved Oxygen	10.6	2.6
Specific Conductance (umho)	34	38
pH (units)	7.2	6.4
Total Nitrate, as N	0.00	0.33
Total Nitrite, as N	.00	.00
Total Ammonia, as N	.08	.09
Total Organic Nitrogen, as N	.69	.60
Total Nitrogen, as N	.77	1.0
Dissolved Orthophosphate, as P	.00	.00
Total Phosphorus, as P	.02	.04
Secchi-Disc Visibility (ft)		8
Chlorophyll <u>a</u> (ug/L)	4.62	--
Aquatic Macrophyte Coverage		
Littoral Zone		50 pct
Water-Surface Zone		<5 pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value 118

Trophic State Index (Carlson, 1977)

TSI _{SD}	47
TSI _{TP}	47
TSI _{Chl}	46



Beaver No. 2 Lake, King County. Photo taken July 26, 1981, view northeasterly.
Bathymetric map from Washington Department of Game, date unknown.

BITTER LAKE

KING COUNTY

WRIA 08

T26N-R04E-19

LATITUDE 47° 43' 31" LONGITUDE 122° 20' 55"

PHYSICAL DATA

Drainage area	0.51 mi ²
Altitude	438 ft
Lake Area	19 acres
Lake Volume	300 acre-ft
Mean Depth	16 ft
Maximum Depth	31 ft
Shoreline Length	0.86 mi
Shoreline Configuration	1.4
Development of Volume	0.51
Bottom Slope	3.0 pct
Surface Inflow	No
Surface Outflow	No

CULTURAL DATA

Residential Development	80	pct
Number of Nearshore Homes	46	
Land Use in Drainage Basin		
Residential-Urban	52	pct
Residential-Suburban	0	pct
Agricultural	0	pct
Forest or Unproductive	42	pct
Lake Surface	6	pct

Public Boat Access to Lake Yes

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

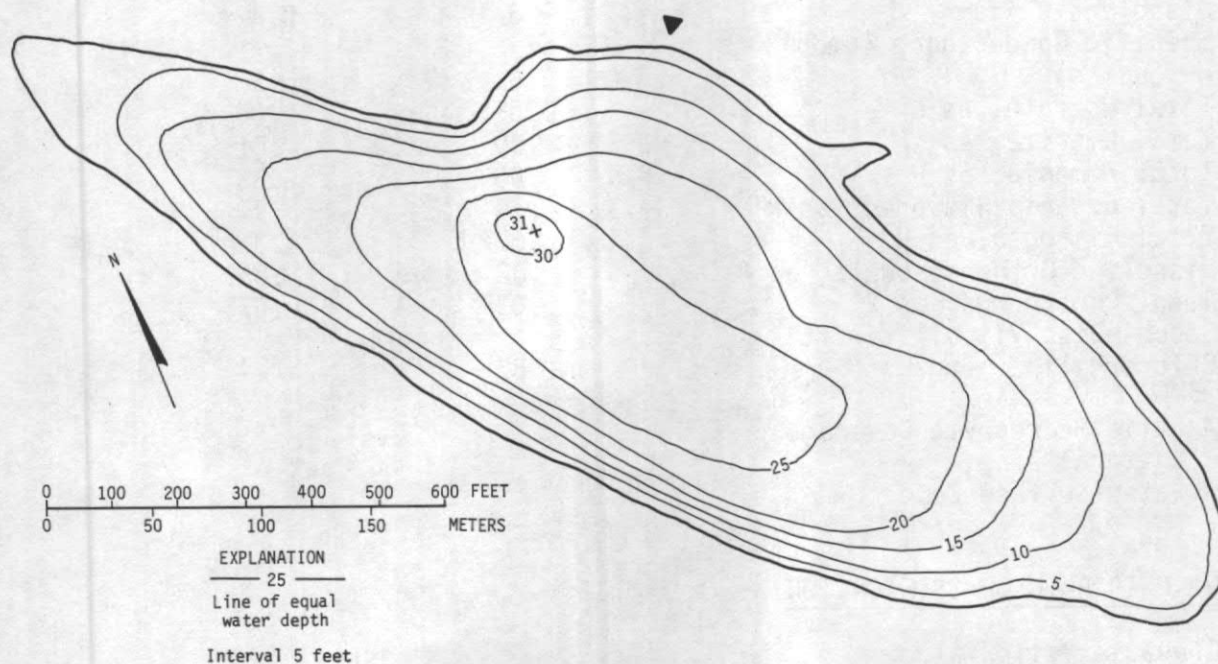
Date

July 1, 1981

Depth (ft)	3	23
Water Temperature (°C)	19.0	11.8
Dissolved Oxygen	8.7	0.2
Specific Conductance (umho)	50	59
pH (units)	6.7	6.3
Total Nitrate, as N	0.01	.00
Total Nitrite, as N	.00	.00
Total Ammonia, as N	.22	.03
Total Organic Nitrogen, as N	.61	.80
Total Nitrogen, as N	.84	.83
Dissolved Orthophosphate, as P	.02	.02
Total Phosphorus, as P	.01	.03
Secchi-Disc Visibility (ft)		13
Chlorophyll <u>a</u> (ug/L)	2.01	--
Aquatic Macrophyte Coverage		
Littoral Zone		80 pct
Water-Surface Zone		5 pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value (Bortleson, 1978)	76
Trophic State Index (Carlson, 1977)	
TSI _{SD}	40
TSI _{TP}	37
TSI _{Chl}	37



Bitter Lake, King County. Photo taken July 1, 1981, view westerly.
Bathymetric map from Washington Department of Game, January 29, 1949.

BLACK LAKE

KING COUNTY

WRIA 07

T25N-R08E-13

LATITUDE 47° 38' 39" LONGITUDE 121° 43' 25"

PHYSICAL DATA

Drainage area	0.24 mi ²
Altitude	1,270 ft
Lake Area	25 acres
Lake Volume	550 acre-ft
Mean Depth	22 ft
Maximum Depth	38 ft
Shoreline Length	0.85 mi
Shoreline Configuration	1.2
Development of Volume	0.58
Bottom Slope	3.2 pct
Surface Inflow	No
Surface Outflow	Yes

CULTURAL DATA

Residential Development	0	pct
Number of Nearshore Homes	0	
Land Use in Drainage Basin		
Residential-Urban	0	pct
Residential-Suburban	0	pct
Agricultural	0	pct
Forest or Unproductive	84	pct
Lake Surface	16	pct
Public Boat Access to Lake	No	

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

Date

June 29, 1981

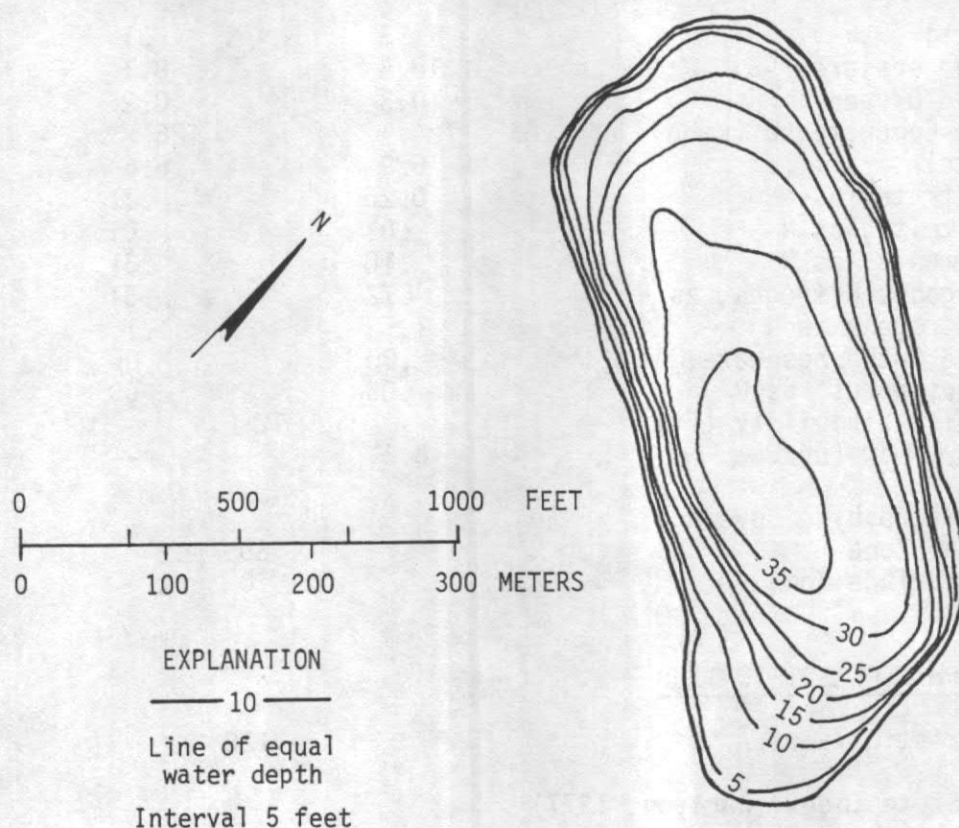
Depth (ft)	3	33
Water Temperature (°C)	19.5	6.3
Dissolved Oxygen	9.6	0.4
Specific Conductance (umho)	26	43
pH (units)	6.5	6.2
Total Nitrate, as N	0.05	.00
Total Nitrite, as N	.00	.01
Total Ammonia, as N	.05	.33
Total Organic Nitrogen, as N	.77	.97
Total Nitrogen, as N	.87	1.3
Dissolved Orthophosphate, as P	.03	.06
Total Phosphorus, as P	.03	.07
Secchi-Disc Visibility (ft)	14	
Chlorophyll <u>a</u> (ug/L)	1.87	--
Aquatic Macrophyte Coverage		
Littoral Zone	80	pct
Water-Surface Zone	1	pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value 90

Trophic State Index (Carlson, 1977)

TSI _{SD}	39
TSI _{TP}	53
TSI _{Chl}	37



Black Lake, King County. Photo taken June 29, 1981, view northwesterly.
Bathymetric map from U.S. Geological Survey, July 9, 1973.

BOREN LAKE

KING COUNTY

WRIA 08

T24N-R05E-28

LATITUDE 47° 31' 52" LONGITUDE 122° 09' 45"

PHYSICAL DATA

Drainage area	1.07 mi ²
Altitude	1,047 ft
Lake Area	18 acres
Lake Volume	330 acre-ft
Mean Depth	18 ft
Maximum Depth	34 ft
Shoreline Length	0.70 mi
Shoreline Configuration	1.2
Development of Volume	0.53
Bottom Slope	3.4 pct
Surface Inflow	No
Surface Outflow	Yes

CULTURAL DATA

Residential Development	75	pct
Number of Nearshore Homes	34	
Land Use in Drainage Basin		
Residential-Urban	0	pct
Residential-Suburban	24	pct
Agricultural	5	pct
Forest or Unproductive	68	pct
Lake Surface	3	pct
Public Boat Access to Lake	Yes	

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

Date

June 26, 1981

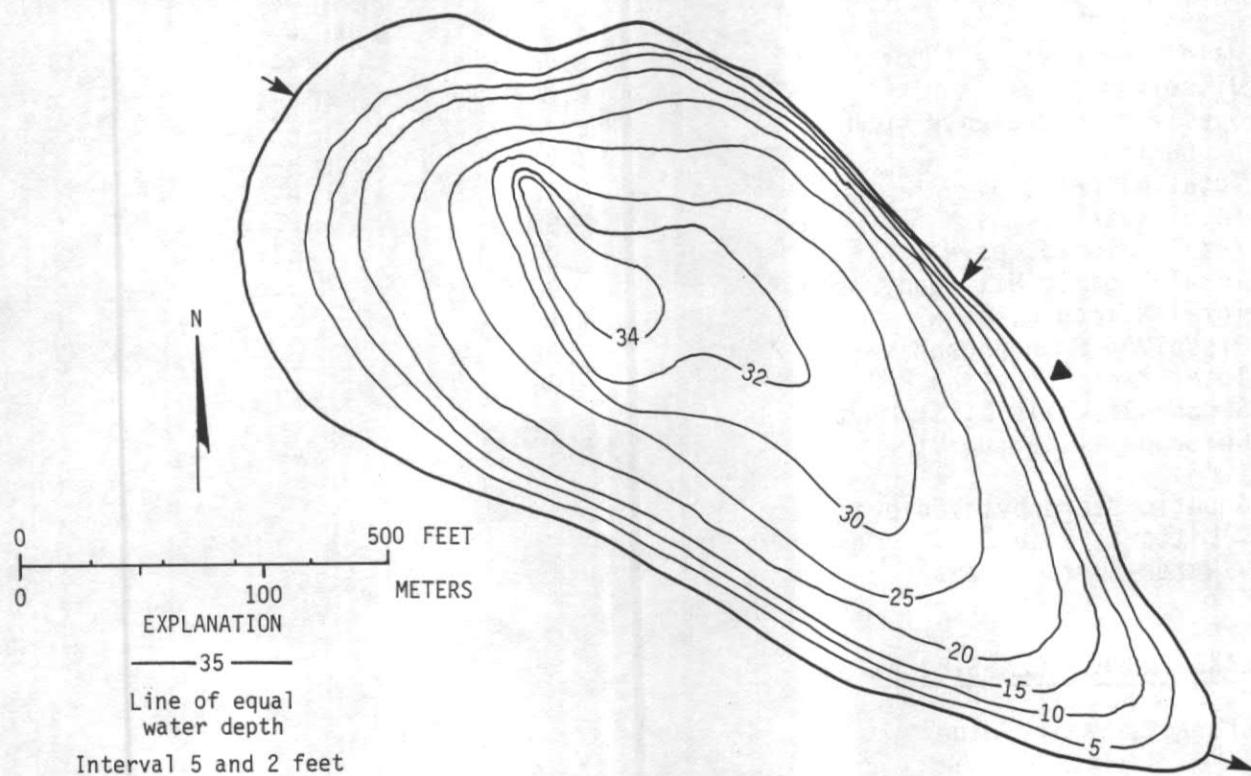
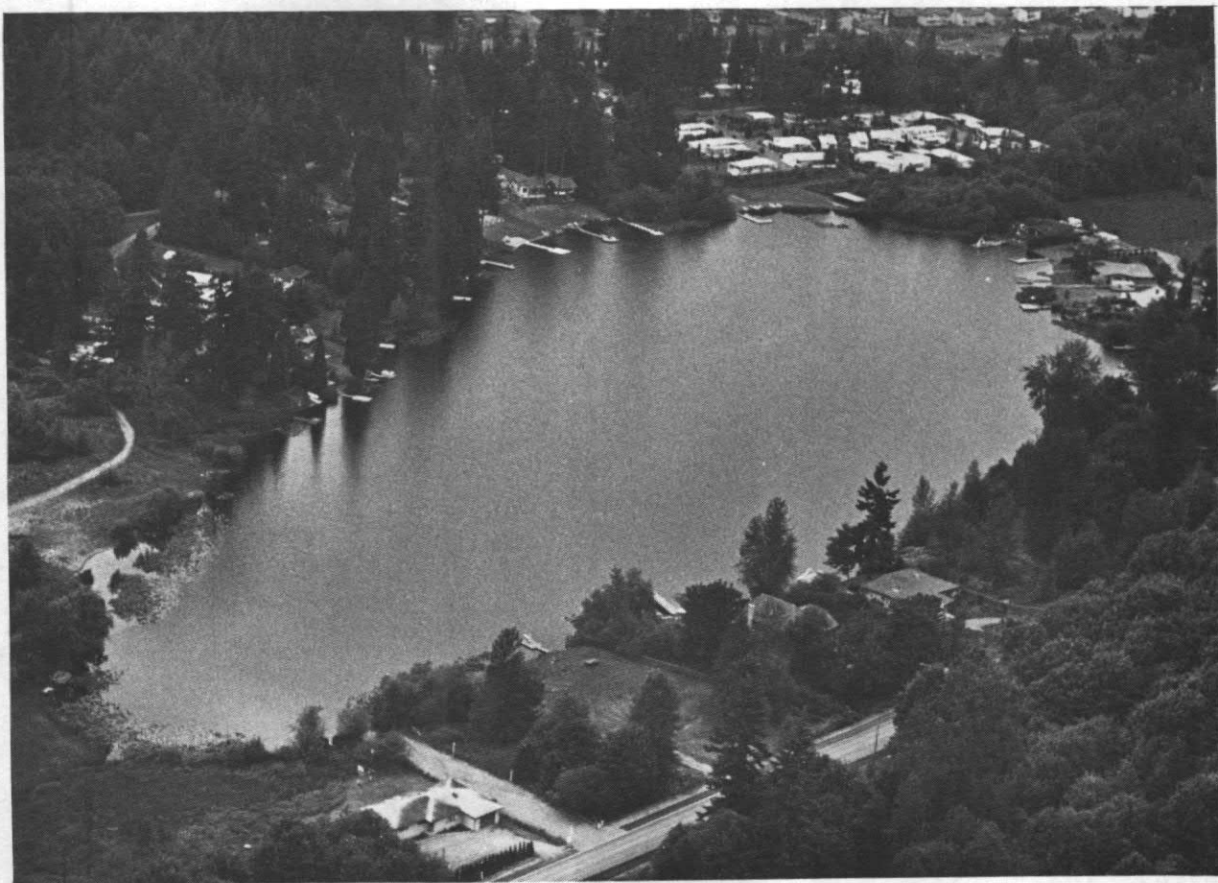
Depth (ft)	3	31
Water Temperature (°C)	18.4	8.1
Dissolved Oxygen	10.3	0.2
Specific Conductance (umho)	124	126
pH (units)	6.9	6.6
Total Nitrate, as N	0.26	.31
Total Nitrite, as N	.01	.01
Total Ammonia, as N	.10	.31
Total Organic Nitrogen, as N	.72	.51
Total Nitrogen, as N	1.1	1.1
Dissolved Orthophosphate, as P	.00	.00
Total Phosphorus, as P	.05	.09
Secchi-Disc Visibility (ft)		12
Chlorophyll <u>a</u> (ug/L)	8.31	--
Aquatic Macrophyte Coverage		
Littoral Zone		80 pct
Water-Surface Zone		10 pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value 120

Trophic State Index (Carlson, 1977)

TSI _{SD}	41
TSI _{TP}	61
TSI _{Chl}	51



Boren Lake, King County. Photo taken June 26, 1981, view northwesterly.
Bathymetric map from Washington Department of Game, October 4, 1946.

BOW LAKE

KING COUNTY

WRIA 09

T23N-R04E-33

LATITUDE 47° 26' 13" LONGITUDE 122° 17' 33"

PHYSICAL DATA

Drainage area	0.55 mi ²
Altitude	338 ft
Lake Area	14 acres
Lake Volume	90 acre-ft
Mean Depth	6 ft
Maximum Depth	10 ft
Shoreline Length	0.68 mi
Shoreline Configuration	1.3
Development of Volume	0.63
Bottom Slope	1.1 pct
Surface Inflow	No
Surface Outflow	No

CULTURAL DATA

Residential Development	40	pct
Number of Nearshore Homes	22	
Land Use in Drainage Basin		
Residential-Urban	86	pct
Residential-Suburban	0	pct
Agricultural	0	pct
Forest or Unproductive	10	pct
Lake Surface	4	pct
Public Boat Access to Lake	No	

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

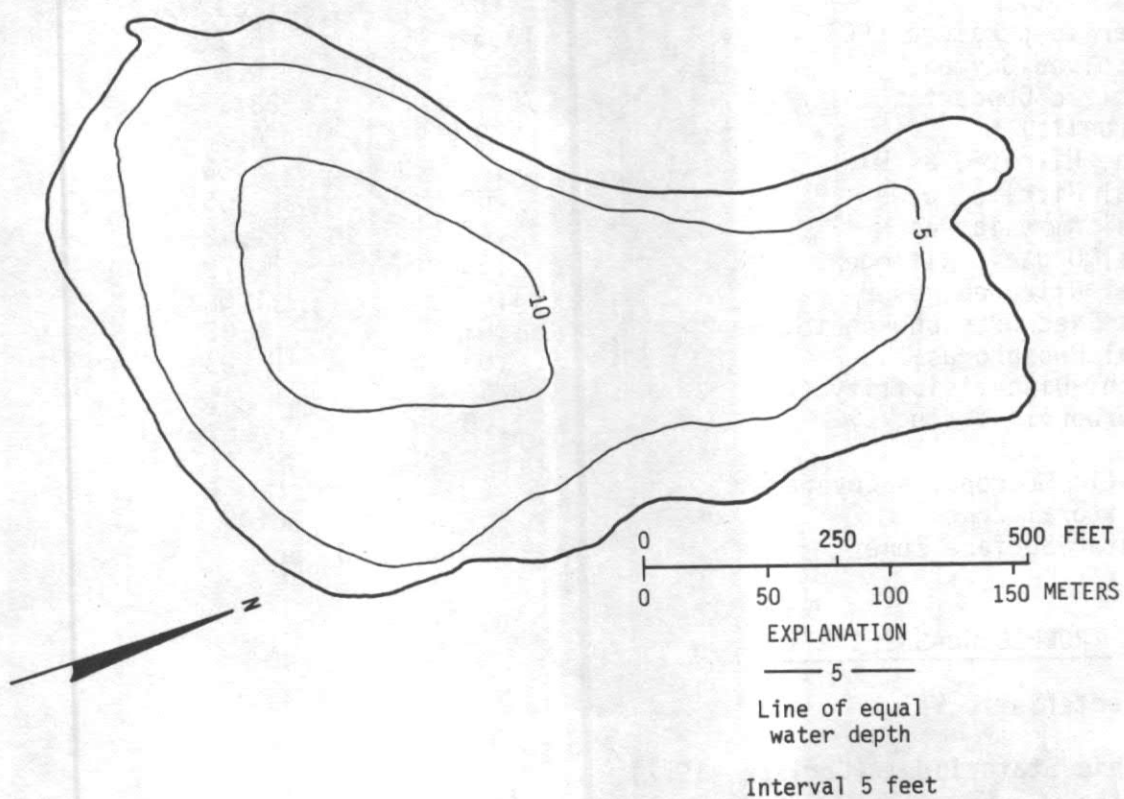
Date

June 24, 1981

Depth (ft)	3	--
Water Temperature (°C)	19.7	--
Dissolved Oxygen	8.8	--
Specific Conductance (umho)	150	--
pH (units)	7.3	--
Total Nitrate, as N	0.16	--
Total Nitrite, as N	.00	--
Total Ammonia, as N	.09	--
Total Organic Nitrogen, as N	.88	--
Total Nitrogen, as N	1.1	--
Dissolved Orthophosphate, as P	.02	--
Total Phosphorus, as P	.08	--
Secchi-Disc Visibility (ft)	9	--
Chlorophyll <u>a</u> (ug/L)	5.47	--
Aquatic Macrophyte Coverage		
Littoral Zone	75	pct
Water-Surface Zone	0	pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value	146
Trophic State Index (Carlson, 1977)	
TSISD	45
TSITP	67
TSIch1	47



Bow Lake, King County. Photo taken June 29, 1979.
 Bathymetric map from U.S. Geological Survey, May 29, 1981.

DEEP LAKE

KING COUNTY

WRIA 09

T21N-R07E-32

LATITUDE 47° 16' 13" LONGITUDE 121° 56' 19"

PHYSICAL DATA

Drainage area	3.92 mi ²
Altitude	770 ft
Lake Area	37 acres
Lake Volume	1,200 acre-ft
Mean Depth	33 ft
Maximum Depth	74 ft
Shoreline Length	1.3 mi
Shoreline Configuration	1.6
Development of Volume	0.45
Bottom Slope	5.2 pct
Surface Inflow	No
Surface Outflow	No

CULTURAL DATA

Residential Development	5	pct
Number of Nearshore Homes	1	
Land Use in Drainage Basin		
Residential-Urban	0	pct
Residential-Suburban	1	pct
Agricultural	6	pct
Forest or Unproductive	91	pct
Lake Surface	2	pct
Public Boat Access to Lake	No	

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

Date

June 23, 1981

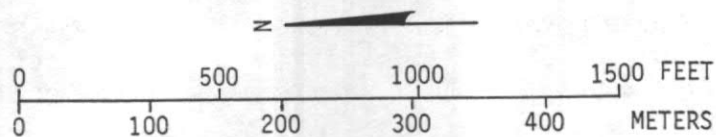
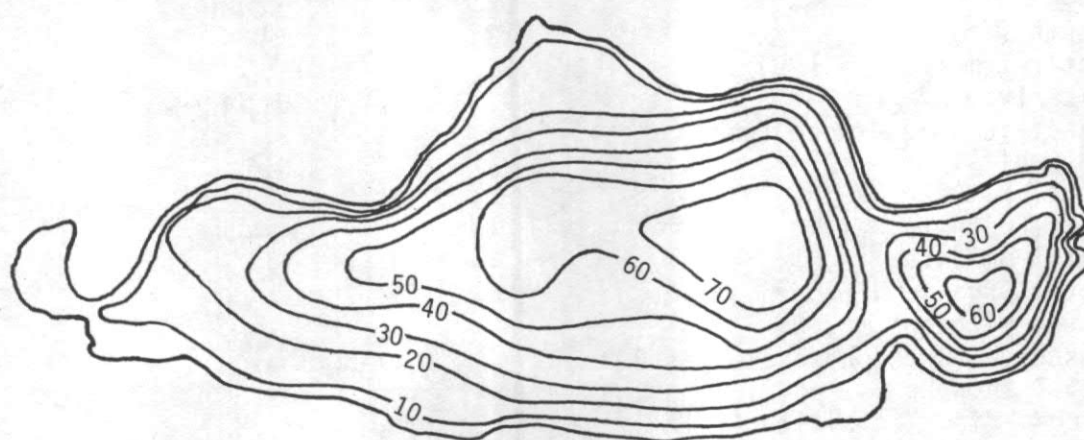
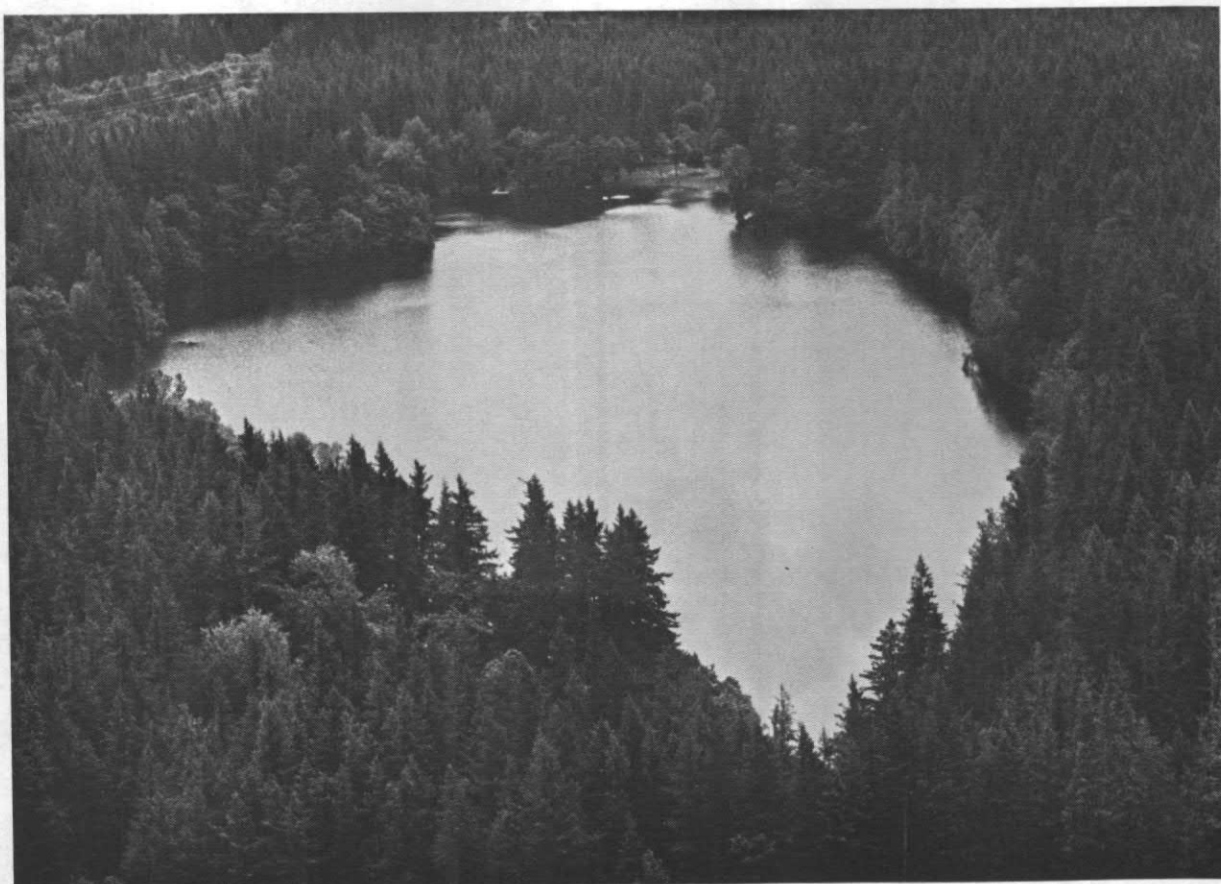
Depth (ft)	3	69
Water Temperature (°C)	13.5	5.2
Dissolved Oxygen	10.0	0.8
Specific Conductance (umho)	75	83
pH (units)	6.9	6.7
Total Nitrate, as N	0.74	.60
Total Nitrite, as N	.00	.00
Total Ammonia, as N	.08	.12
Total Organic Nitrogen, as N	.53	.79
Total Nitrogen, as N	1.4	1.5
Dissolved Orthophosphate, as P	.02	.03
Total Phosphorus, as P	.03	.03
Secchi-Disc Visibility (ft)	11	
Chlorophyll <u>a</u> (ug/L)	1.08	--
Aquatic Macrophyte Coverage		
Littoral Zone	0	pct
Water-Surface Zone	0	pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value 80

Trophic State Index (Carlson, 1977)

TSISD	43
TSITP	53
TSICh1	31



EXPLANATION
 — 10 —
 Line of equal
 water depth
 Interval 10 feet

Deep Lake, King County. Photo taken June 23, 1981, view southerly.
 Bathymetric map from U.S. Geological Survey, July 2, 1973.

DOLLOFF LAKE

KING COUNTY

WRIA 09

T21N-R04E-10

LATITUDE 47° 19' 25" LONGITUDE 122° 17' 05"

PHYSICAL DATA

Drainage area	0.81 mi ²
Altitude	405 ft
Lake Area	20 acres
Lake Volume	200 acre-ft
Mean Depth	10 ft
Maximum Depth	19 ft
Shoreline Length	1.1 mi
Shoreline Configuration	1.7
Development of Volume	0.51
Bottom Slope	1.8 pct
Surface Inflow	No
Surface Outflow	Yes

CULTURAL DATA

Residential Development	70	pct
Number of Nearshore Homes	38	
Land Use in Drainage Basin		
Residential-Urban	3	pct
Residential-Suburban	10	pct
Agricultural	18	pct
Forest or Unproductive	65	pct
Lake Surface	4	pct

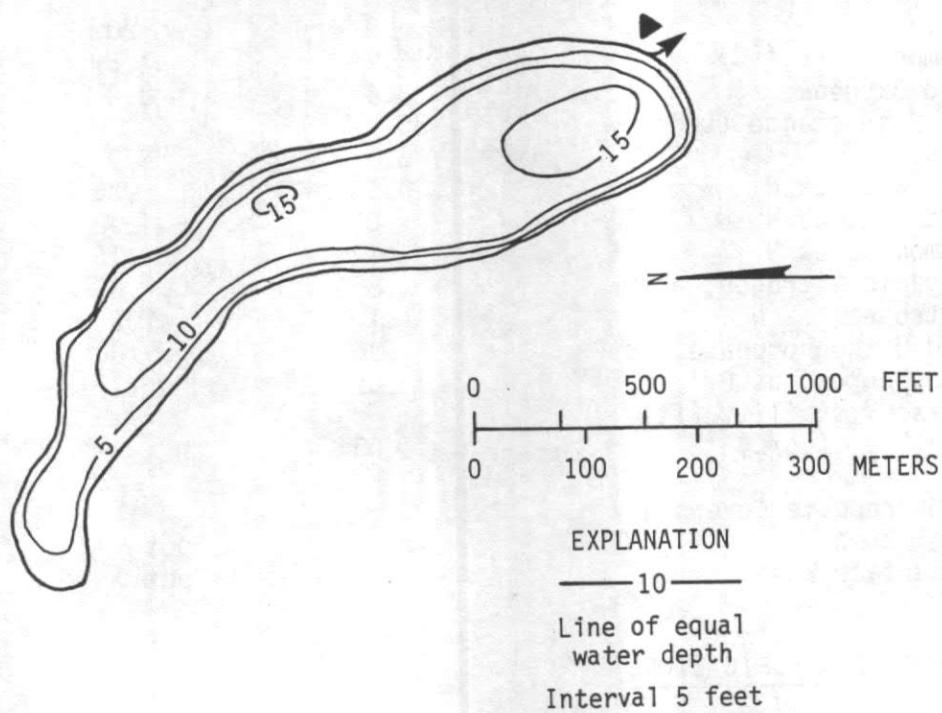
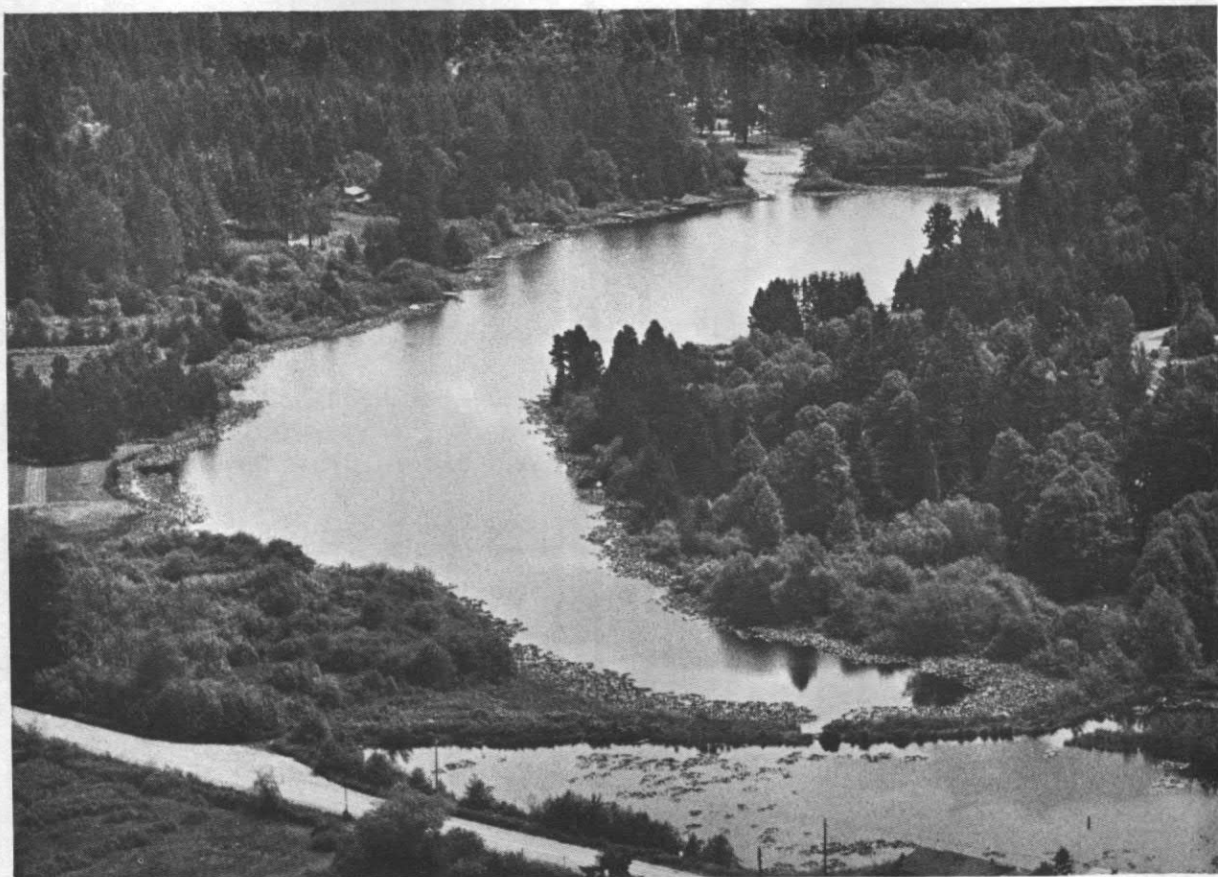
Public Boat Access to Lake Yes

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

Date	June 11, 1981		September 17, 1981	
Depth (ft)	3	14	3	14
Water Temperature (°C)	16.8	11.0	16.8	16.1
Dissolved Oxygen	9.8	0.1	--	--
Specific Conductance (umho)	80	88	83	112
pH (units)	7.1	6.6	6.6	6.2
Total Nitrate, as N	--	--	<0.06	<0.07
Total Nitrite, as N	--	--	.03	.03
Total Ammonia, as N	--	--	.14	1.3
Total Organic Nitrogen, as N	--	--	1.5	1.1
Total Nitrogen, as N	--	--	1.6	2.5
Dissolved Orthophosphate, as P	--	--	.05	.24
Total Phosphorus, as P	--	--	.05	.26
Secchi-Disc Visibility (ft)		4		3
Chlorophyll <u>a</u> (ug/L)	33.9	--	--	--
Aquatic Macrophyte Coverage				
Littoral Zone		90 pct		-- pct
Water-Surface Zone		5 pct		-- pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value	--	395
Trophic State Index (Carlson, 1977)		
TSI _{SD}	57	61
TSI _{TP}	--	61
TSI _{Chl}	65	--



Dolloff Lake, King County. Photo taken June 11, 1981, view southeasterly.
Bathymetric map from Washington Department of Game, February 25, 1953.

DUBOIS LAKE

KING COUNTY

WRIA 07

T26N-R06E-03

LATITUDE 47° 45' 54" LONGITUDE 122° 01' 47"

PHYSICAL DATA

Drainage area	0.72 mi ²
Altitude	390 ft
Lake Area	12 acres
Lake Volume	132 acre-ft
Mean Depth	11 ft
Maximum Depth	20 ft
Shoreline Length	1.1 mi
Shoreline Configuration	2.4
Development of Volume	0.55
Bottom Slope	2.5 pct
Surface Inflow	No
Surface Outflow	Yes

CULTURAL DATA

Residential Development	25	pct
Number of Nearshore Homes	9	
Land Use in Drainage Basin		
Residential-Urban	0	pct
Residential-Suburban	<1	pct
Agricultural	0	pct
Forest or Unproductive	97	pct
Lake Surface	3	pct
Public Boat Access to Lake	No	

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

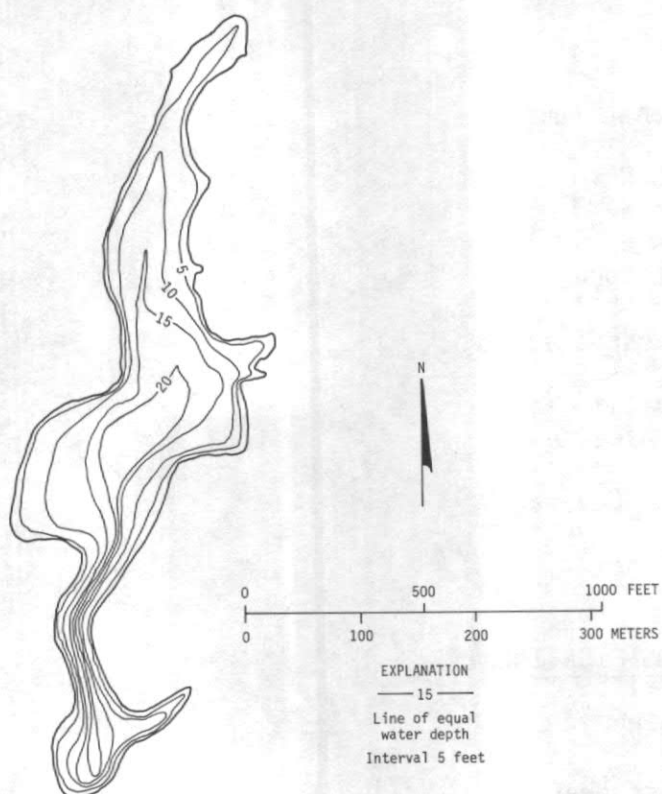
Date

July 6, 1981

Depth (ft)	3	20
Water Temperature (°C)	19.2	7.8
Dissolved Oxygen	8.4	0.2
Specific Conductance (umho)	36	40
pH (units)	6.3	5.9
Total Nitrate, as N	0.10	.36
Total Nitrite, as N	.01	.02
Total Ammonia, as N	.12	.16
Total Organic Nitrogen, as N	.85	.65
Total Nitrogen, as N	1.1	1.2
Dissolved Orthophosphate, as P	.00	.00
Total Phosphorus, as P	.01	.11
Secchi-Disc Visibility (ft)		6
Chlorophyll <u>a</u> (ug/L)	4.00	--
Aquatic Macrophyte Coverage		
Littoral Zone		5 pct
Water-Surface Zone		1 pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value	147
Trophic State Index (Carlson, 1977)	
TSI _{SD}	51
TSI _{TP}	37
TSI _{Chl}	44



Dubois Lake, King County. Photo taken July 6, 1981, view northerly.
Bathymetric map from U.S. Geological Survey, June 10, 1981.

ECHO LAKE

KING COUNTY

WRIA 08

T26N-R04E-06

LATITUDE 47° 46' 23" LONGITUDE 122° 20' 25"

PHYSICAL DATA

Drainage area	0.45 mi ²
Altitude	393 ft
Lake Area	13 acres
Lake Volume	220 acre-ft
Mean Depth	14 ft
Maximum Depth	30 ft
Shoreline Length	0.64 mi
Shoreline Configuration	1.3
Development of Volume	0.46
Bottom Slope	3.6 pct
Surface Inflow	Yes
Surface Outflow	Yes

CULTURAL DATA

Residential Development	100	pct
Number of Nearshore Homes	31	
Land Use in Drainage Basin		
Residential-Urban	96	pct
Residential-Suburban	0	pct
Agricultural	0	pct
Forest or Unproductive	0	pct
Lake Surface	4	pct
Public Boat Access to Lake	No	

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

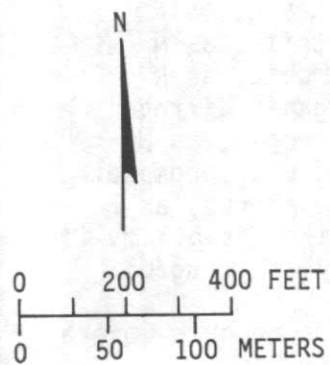
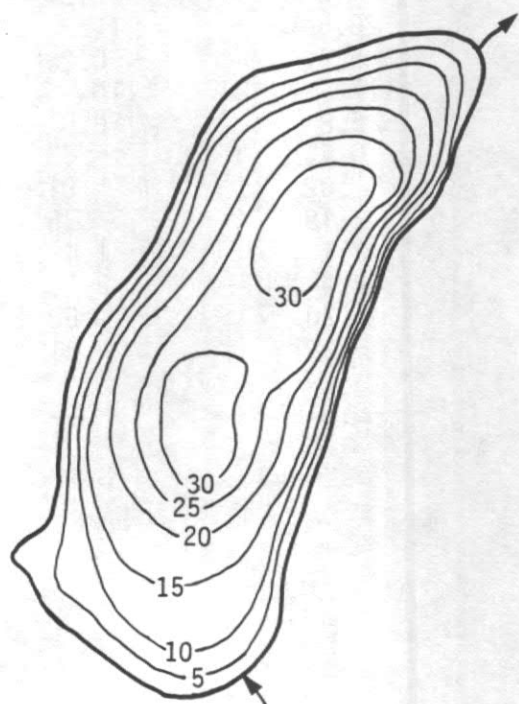
Date

July 1, 1981

Depth (ft)	3	29
Water Temperature (°C)	18.5	9.2
Dissolved Oxygen	8.7	0.2
Specific Conductance (umho)	53	63
pH (units)	6.9	6.4
Total Nitrate, as N	0.01	.01
Total Nitrite, as N	.00	.00
Total Ammonia, as N	.04	.41
Total Organic Nitrogen, as N	.81	1.1
Total Nitrogen, as N	.86	1.5
Dissolved Orthophosphate, as P	.01	.03
Total Phosphorus, as P	.02	.08
Secchi-Disc Visibility (ft)		10
Chlorophyll <u>a</u> (ug/L)	1.68	--
Aquatic Macrophyte Coverage		
Littoral Zone		30 pct
Water-Surface Zone		<5 pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value	104
Trophic State Index (Carlson, 1977)	
TSI _{SD}	44
TSI _{TP}	47
TSI _{Chl}	36



EXPLANATION
 — 10 —
 Line of equal
 water depth
 Interval 5 feet

Echo (26N-4E-6) Lake, King County. Photo taken July 1, 1981, view northerly.
 Bathymetric map from Washington Department of Game, June 6, 1946.

LARSEN LAKE

KING COUNTY

WRIA 08

T25N-R05E-35

LATITUDE 47° 36' 22" LONGITUDE 122° 08' 21"

PHYSICAL DATA

Drainage area	0.31 mi ²
Altitude	245 ft
Lake Area	10 acres
Lake Volume	95 acre-ft
Mean Depth	9 ft
Maximum Depth	16 ft
Shoreline Length	0.47 mi
Shoreline Configuration	1.0
Development of Volume	0.57
Bottom Slope	2.1 pct
Surface Inflow	No
Surface Outflow	No

CULTURAL DATA

Residential Development	4	pct
Number of Nearshore Homes	1	
Land Use in Drainage Basin		
Residential-Urban	61	pct
Residential-Suburban	0	pct
Agricultural	34	pct
Forest or Unproductive	0	pct
Lake Surface	5	pct
Public Boat Access to Lake	No	

WATER-QUALITY DATA (in milligrams per liter) unless otherwise indicated)

Date

June 29, 1981

Depth (ft)	3	13
Water Temperature (°C)	20.6	11.3
Dissolved Oxygen	6.4	0.2
Specific Conductance (umho)	112	114
pH (units)	6.8	6.6
Total Nitrate, as N	0.11	.03
Total Nitrite, as N	.02	.01
Total Ammonia, as N	.18	.75
Total Organic Nitrogen, as N	2.1	1.4
Total Nitrogen, as N	2.4	2.1
Dissolved Orthophosphate, as P	.20	.53
Total Phosphorus, as P	.29	.61
Secchi-Disc Visibility (ft)		2.5
Chlorophyll <u>a</u> (ug/L)	5.84	--

Aquatic Macrophyte Coverage

Littoral Zone

80 pct

Water-Surface Zone

1 pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value

453

Trophic State Index (Carlson, 1977.)

TSI_{SD}

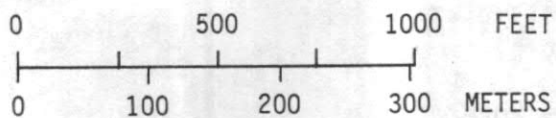
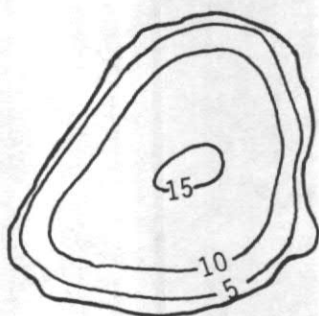
64

TSI_{TP}

86

TSI_{Chl}

48



EXPLANATION

— 10 —

Line of equal
water depth

Interval 5 feet

Larsen Lake, King County. Photo taken June 29, 1981, view northeasterly.
Bathymetric map from U.S. Geological Survey, July 11, 1973.

LUCERNE LAKE

KING COUNTY

WRIA 09

T22N-R06E-28

LATITUDE 47° 22' 04" LONGITUDE 122° 02' 53"

PHYSICAL DATA

Drainage area	0.63 mi ²
Altitude	530 ft
Lake Area	18 acres
Lake Volume	310 acre-ft
Mean Depth	18 ft
Maximum Depth	37 ft
Shoreline Length	0.70 mi
Shoreline Configuration	1.2
Development of Volume	0.47
Bottom Slope	3.7 pct
Surface Inflow	No
Surface Outflow	Yes

CULTURAL DATA

Residential Development	90	pct
Number of Nearshore Homes	35	
Land Use in Drainage Basin		
Residential-Urban	0	pct
Residential-Suburban	5	pct
Agricultural	0	pct
Forest or Unproductive	77	pct
Lake Surface	18	pct
Public Boat Access to Lake	No	

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

Date

June 26, 1981

Depth (ft)	3	32
Water Temperature (°C)	19.6	5.8
Dissolved Oxygen	10.4	0.1
Specific Conductance (umho)	73	100
pH (units)	6.6	6.3
Total Nitrate, as N	0.00	.00
Total Nitrite, as N	.00	.00
Total Ammonia, as N	.09	1.0
Total Organic Nitrogen, as N	.69	.90
Total Nitrogen, as N	.78	1.9
Dissolved Orthophosphate, as P	.00	.00
Total Phosphorus, as P	.02	.06
Secchi-Disc Visibility (ft)		8
Chlorophyll <u>a</u> (ug/L)	13.9	--

Aquatic Macrophyte Coverage

Littoral Zone

80 pct

Water-Surface Zone

20 pct

LAKE TROPHIC CLASSIFICATION

Characteristic Value

150

Trophic State Index (Carlson, 1977)

TSISD

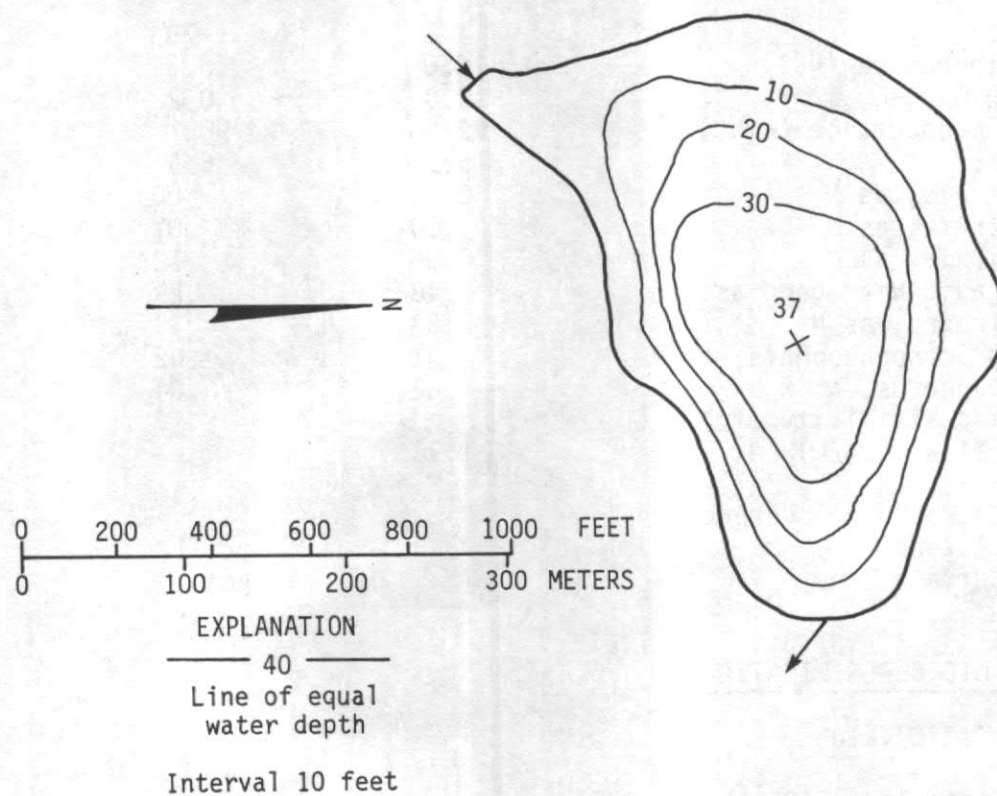
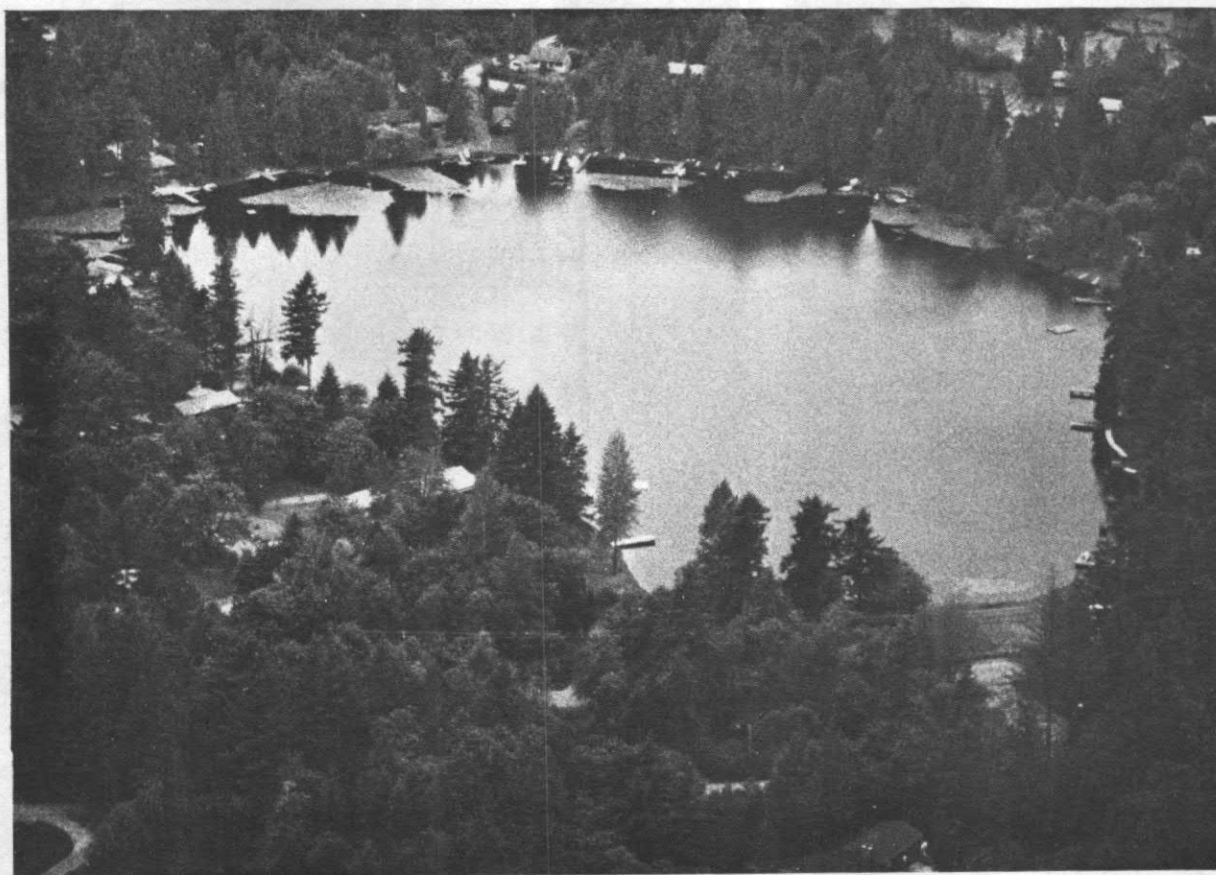
47

TSITP

47

TSIChl

56



Lucerne Lake, King County. Photo taken June 26, 1981, view westerly.
Bathymetric map from U.S. Geological Survey, February 3, 1955.